

Simone Novelli

Education

<i>Sept. '13-Feb'17</i>	Università degli Studi di Roma "LA SAPIENZA". Phd in Biomedical and Industrial Engineering Research field: Liver transplantation, MRI images, histomorphometric analysis, 3d reconstruction, project management.	Rome-Paris
<i>Sept. '12-Sept'13</i>	ESCP Europe Business School Master in European Business.in two countries and two languages Subjects: Corporate Finance, Economics, Accounting, Consulting, Law.	Turin-Paris
<i>Feb. '13</i>	Qualifying examination for engineers	Rome
<i>Sept. '10-Oct. '12</i>	Università degli Studi di Roma "LA SAPIENZA". Obtained Master degree in Biomedical Engineering. Score: 110/110. GPA: 3.91, excellent. Date of final Exam: 23 October 2012	Rome
<i>Sept. '06-Sept'10</i>	Università degli Studi di Roma "LA SAPIENZA". Obtained Bachelor degree in Clinical Engineering Thesis title "Histomorphometric analysis of hepatic microcirculation"	Rome

Work experience

<i>May '17-present</i>	Sapienza University of Rome in collaboration agreement with University College London (UCL) -Institute for Liver and Digestive Health, Royal Free Hospital Post-doctoral research fellow. Field of study: Liver MRI, drug development studies in ACLF (acute on chronic liver failure), 3D Printing and Regenerative Medicine.	London
<i>Dec '11 – July'12</i>	Nanyang technology University (NTU) Research Engineering: Development of a Real Time 3D Surgical Scene for Natural Orifice Endoscopic Surgery & Prostate Imaging trials and findings about cancer research	Singapore
<i>'02 – '12</i>	Keen Water Polo player Member of "Vis Nova" water polo team, participated in National Championships	Rome

Language Skills

English	Fluent	Italian	Mother tongue
French	Fluent		

Scientific Publications

- Recombinant Alkaline Phosphatase Prevents Acute on Chronic Liver Failure Engelmann C1,2, Adebayo D1, Oria M1, De Chiara F1, Novelli S1,3, Habtesion A1, Davies N1, Andreola F1, Jalan R4. *Sci Rep.* 2020 Jan 15;10(1):389. doi: 10.1038/s41598-019-57284-z.
- 3D Reconstruction Model of an Extra-Abdominal Desmoid Tumor: A Case Study Franco Marinozzi 1, Francesco Carleo 2, Simone Novelli 1, Marco Di Martino 2, Giuseppe Cardillo 2, Lea Petrella 3, Fabiano Bini PMID: 32596221 PMCID: [PMC7304331](https://pubmed.ncbi.nlm.nih.gov/32596221/) DOI: [10.3389/fbioe.2020.00518](https://doi.org/10.3389/fbioe.2020.00518)
- There Is a Great Future in Plastics: Personalized Approach to the Management of Hilar Cholangiocarcinoma Using a 3-D-Printed Liver Model, Zoe Larghi Laureiro 1, Simone Novelli 2 3, Quirino Lai 4, Gianluca Mennini 1, Vito D'andrea 5, Paolo Gaudenzi 2, Franco Marinozzi 2, Cornelius Engelmann 3, Raj Mookarje 3, Dimitri Raptis 3, Massimo Rossi 1, Rajiv Jalan 3. PMID: 3244074 DOI: [10.1007/s10620-020-06326-y](https://doi.org/10.1007/s10620-020-06326-y)
- Toll-like receptor 4 is a therapeutic target for prevention and treatment of liver failure. Engelmann C1, Sheikh M2, Sharma S2, Kondo T3, Loeffler-Wirth H4, Zheng YB5, Novelli S6, Hall A7, Kerbert AJC2, Macnaughtan J2, Mookerjee R2, Habtesion A2, Davies N2, Ali T8, Gupta S8, Andreola F2, Jalan R9.
- *Plasmapheresis, Photopheresis, and Endovenous Immunoglobulin in Acute Antibody-mediated Rejection in Kidney Transplantation.* Pretagostini R, Poli L., Gozzer M., Pettorini L., Garofalo M., **Novelli S.**, Cinti P., Berloco P.B. (2015). *TRANSPLANTATION PROCEEDINGS*, vol. 47, p. 2142-2144, ISSN: 0041-1345, doi: 10.1016/j.transproceed.2015.01.030
- *Glasgow coma score and tumor necrosis factor α as predictive criteria for initial poor graft function.* Novelli G., Morabito V, Lai Q., Levi Sandri G.B., Melandro F., Pugliese F., **Novelli S.**, Rossi M., Berloco P.B. (2012). *TRANSPLANTATION PROCEEDINGS*, vol. 44, ISSN: 0041-1345, doi: 10.1016/j.transproceed.2012.06.038
- Management of sepsis during MARS treatment in acute on chronic liver failure. Novelli G, Morabito V, Pugliese F, Ferretti G, Novelli S, Ianni S, Lai Q, Rossi M, Berloco PB. (2012). *TRANSPLANTATION PROCEEDINGS*, ISSN: 0041-1345
- *Preliminary study of early histomorphometric changes in hepatic steatosis.* Marinozzi F., **Novelli S.**, Morabito V, Bini F., Berloco P.B., Carpino A., Rossi M., Novelli G., Gaudio E. (2012). *TRANSPLANTATION PROCEEDINGS*, vol. 44, ISSN: 0041-1345, doi: 10.1016/j.transproceed.2012.06.037
- *Safety of Polymyxin-B-based Hemoperfusion in Kidney and Liver Transplant Recipients.* Novelli G, Morabito V, Ferretti G, Poli L, **Novelli S.**, Ruberto F, Pugliese F, Mennini G, Rossi M, Berloco PB. (2012).

- *Management of sepsis during MARS treatment in acute on chronic liver failure.* Novelli G, Morabito V., Pugliese F., Ferretti G., **Novelli S.**, Ianni S., Lai Q., Rossi M., Berloco P.B. (2011). TRANSPLANTATION PROCEEDINGS, vol. 43, ISSN: 0041-1345, doi: 10.1016/j.transproceed.2011.01.150
- *Predictive parameters after molecular adsorbent recirculating system treatment integrated with model for end stage liver disease model in patients with acute-on-chronic liver failure.* Novelli G, Rossi M, Ferretti G, Pugliese F, Travaglia D, Guidi S, **Novelli S**, Lai Q, Morabito V, Berloco PB. (2010). TRANSPLANTATION PROCEEDINGS, ISSN: 0041-1345
- *Cytokine level modifications: molecular adsorbent recirculating system versus standard medical therapy.* Novelli G, Annesini MC, Morabito V, Cinti P, Pugliese F, **Novelli S**, Piemonte V, Turchetti L, Rossi M, Berloco PB. (2009). TRANSPLANTATION PROCEEDINGS, ISSN: 0041-1345
- *Predictive criteria for the outcome of patients with acute liver failure treated with the albumin dialysis molecular adsorbent recirculating system.* Novelli G, Rossi M, Ferretti G, Pugliese F, Ruberto F, Lai Q, **Novelli S**, Piemonte V, Turchetti L, Morabito V, Annesini MC, Berloco PB. (2009). THERAPEUTIC APHERESIS AND DIALYSIS, ISSN: 1744-9979
- *Pediatric acute liver failure with molecular adsorbent recirculating system treatment* Novelli G, Rossi M, Morabito V, Pugliese F, Ruberto F, Perrella SM, **Novelli S**, Spoletini G, Ferretti G, Mennini G, Berloco PB (2008).. TRANSPLANTATION PROCEEDINGS, ISSN: 0041-1345
- *Primary nonfunction: timing retransplantation versus hemodynamic parameters and kidney function.* Novelli G, Rossi M, Poli L, Morabito V, Bussotti A, Pugliese F, Ruberto F, **Novelli S**, Mennini G, Berloco

Teaching

- **Sapienza University of Rome. Faculty of Biomedical Engineering .**
Academic year 2019/2020, 2020/21, 2021/2022
Course Title: Applicazioni tecnologiche in chirurgia e patologie da ambiente ospedaliero

University Projects

- **Sapienza University of Rome. Dipartimento di chirurgia generale e specialistica Paride Stefanini**
Project title: Evaluation of steatosis: Computer assisted image analysis and MR imaging.
- **Sapienza University of Rome. Dipartimento di chirurgia generale e specialistica Paride Stefanini**
Project title: Modellazione di scenari chirurgici virtuali: dal training operatorio alla realizzazione di strumentario mediante prototipazione rapida
- **UCL (University college London) Institute for Liver and Digestive Health, Division of Medicine** Assessment of Glucocorticoid Resistance in Acute on Chronic Liver Failure: clinical relevance (ongoing)
- **UCL (University college London) Institute for Liver and Digestive Health, Division of Medicine** Investigating the role of the stem cell homing pathway SDF-1/CXCR4 in acute-on-chronic liver failure in order to explore novel chemokine based treatment options (ongoing)
- **UCL (University college London) Institute for Liver and Digestive Health, Division of Medicine**
A new non-invasive approach for hemodynamics assesment in liver failure patients: 3d reconstruction, computational fluid dynamics and 3d printing. (ongoing)

Books Chapters

Biomedical Engineering Challenges: A Chemical Engineering Insight. Edited by Wiley; 1th edition (February 2018)

- Chapter 2: Artificial Kidney: The New Challenge (Pasquale Berloco, **Simone Novelli**, and Renzo Pretagostini)

Current Trends and Future Developments on (Bio-) Membranes

- Chapter 2: Membrane application for liver support devices (Simone Novelli, Cornelius Engelman, Vincenzo Piemonte)
- Chapter 5: Membranes, devices for blood separation and purification (Simone Novelli, Renzo Pretagostini, Vincenzo Piemonte)

Skills

Operating systems: Windows (PC) and Mac. Microsoft Office including advanced knowledge of Excel, Word, PowerPoint and Access. Research related programs LabView, Photoshop, Matlab and R. Extensive international experience resulting in immense cultural awareness. Hard working, adaptable, confident and determined to constantly learn and improve.

Interests

Oct.10 –Dec'13

Coached Roma Women's water polo team, active supporter in Italian Championships

Set. '08-present

University assistant at department of Mechanical and Aerospace Engineering "La Sapienza University of Rome" – publication of several articles.

*autorizzo la pubblicazione del mio CV senza dati sensibili