



Newsletter March 2021

In the first three months of the year, CRMD has been registering further positive news that we would like to share with all those attached to our Centre.

In January, we held the **CRMD Annual Get Together Event** that this year was delivered online and hosted by the IT platform of our industrial partner Et Alia. During the event, presentations were delivered by our members and PhD students and we were delighted to have as external guests industrial and academic colleagues of the Healthy Futures focus group on Regenerative Medicine and Devices. We will soon make the talks visible on our new blog page that we encourage you to visit at:

<https://blogs.brighton.ac.uk/crmd/>

We would like to thank Isobel Creed and Michael Wilson for working hard to the construction of this new site that will help improve the visibility of our Centre. Please help us to keep it updated with any material promoting our research by sending information to our new email address:

RegenerativeMedicineDevices@brighton.ac.uk

We would like to congratulate **Dr Flavia Bonalumi** who successfully defended her thesis in January. This achievement was followed by the publication of data from Flavia's project in a paper co-authored with her supervisors and CRMD's members, Dr Susan Sandeman and Prof Cyril Crua.

Bonalumi, F., Crua, C., Savina, I. N., Davies, N., Habstesion, A., Santini, M., Fest-Santini, S. & Sandeman, S. Bioengineering a cryogel-derived bioartificial liver using particle image velocimetry defined fluid dynamics 23 Feb 2021, Materials Science and Engineering C. 123, 111983, doi: [10.1016/j.msec.2021.111983](https://doi.org/10.1016/j.msec.2021.111983)

We are proud to see Flavia now being a successful member of the staff at our partner company Tissue Click Ltd where she has been developing a new diagnostic kit for Covid-19 with the support of Innovate UK. Tissue Click has also employed our ex undergraduate and Master in Research student, Ms Sophia Khan who is also involved in the development of the diagnostic kit by the company as well as in the research on meniscus regeneration supported by the European Commission.

Data from the PhD of **Dr Tochukwu Ozulumba** and her supervisor Dr Sandeman were published as open access paper in the official journal of the European Society for Biomaterials, i.e. Biomaterials Science:

Ozulumba, T., Ingavle, G., Gogotsi, Y. & Sandeman, S. Moderating cellular inflammation using 2-dimensional titanium carbide MXene and graphene variants 8 Jan 2021, Biomaterials Science, doi: [10.1039/d0bm01953d](https://doi.org/10.1039/d0bm01953d)

Capitalising on her external collaborations, **Dr Sandeman** also published the paper entitled: *Surface-Functionalized Conducting Nanofibers for Electrically Stimulated Neural Cell Function Borah, R., Ingavle, G., Kumar, A., Sandeman, S. & Mikhalovsky, S., 15 Jan 2021, Biomacromolecules. p. 1-18, doi: [10.1021/acs.biomac.0c01445](https://doi.org/10.1021/acs.biomac.0c01445)*

Likewise, through his international collaboration with colleagues in New Zealand, **Dr Simon Otter** published an open access editorial entitled: *Disparities in foot care – is inflammatory arthritis still a poor relation?*



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Rome, K. & Otter, S., 10 Feb 2021, *Rheumatology Advances in Practice*. rkab008, doi:
[10.1093/rap/rkab008](https://doi.org/10.1093/rap/rkab008)

Associate Prof Peter Watt published the paper entitled:

The elderly's physiological and perceptual responses to cooling during simulated activities of daily living in UK summer climatic conditions, Waldock, K., Hayes, M., Watt, P. & Maxwell, N., 1 Mar 2021, In: *Public health*. 193, p. 1-9 9, doi: [10.1016/j.puhe.2021.01.016](https://doi.org/10.1016/j.puhe.2021.01.016)

We look forward to the outcomes of the **Orthopaedic Research UK-funded project** received by **Dr Valeria Perugini, Dr Giselda Bucca, Dr Andrew Hesketh and Prof Matteo Santin**. This is an 18-months project starting on 1st April in collaboration with the South West London Elective Orthopaedic Centre, Epsom and St Helier Hospital Trust focussing on the study of the effect of liposuction procedures and anaesthetics on the tissue regeneration potential of mesenchymal stromal cells isolated from adipose tissue.

Last but not least, we are delighted to welcome **Dr Guan Wang** from the School of Sport Science and Management as a new member of our CORE. Guan's application was ratified by the Management Board of our Centre who were impressed by her work in sport science and genomics. We look forward to seeing Guan's research applied to the fields of regenerative medicine and devices and strengthening our early career researchers' base.

We are aware of proposals and papers submitted or in preparation by members of our CORE and we hope to be able to announce their success in the coming months.

We encourage the submission of abstracts to the 31st European Society for Biomaterials Conference that will be held either in Porto or as virtual event from 5th to 9th September 2021

<https://esb2021.org/>

The deadline for abstract submission is Monday 12th April

Finally, we will soon start working at the preparation of the formal assessment of our CORE that will take place late this Summer.

In the meantime, we wish you a very relaxing Easter holiday.

On behalf of the Management Board

Prof Matteo Santin, Director