

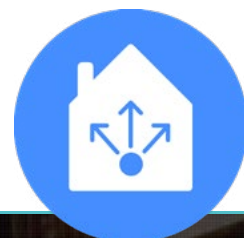
# Fellowship in Residence

## Virtual Convolution & Sound Morphing: Pushing the Boundaries of Digital Acoustics

An opportunity to spend six months on a Fellowship with multi-award-winning [Wounded Buffalo Sound Studios](#). This is a practical Fellowship for an established digital audio technologist or creative digital sound practitioner. You will investigate how cutting-edge acoustic technologies can be harnessed to create, manipulate, and transform sound in a virtual environment.

Wounded Buffalo are exploring how to both 'capture' and 'measure' impulse responses within virtual 3D spaces, and new approaches to spectral sound manipulation.

This Fellowship aligns with an ongoing R&D project at Wounded Buffalo, which seeks to expand the creative possibilities of sound design by fusing physical acoustic theory with digital signal processing.



# Overview

Our MyWorld Fellowships are aimed at freelancers, practitioners, industry folk, and academics based in the West of England. They offer paid experimentation and research time, with an emphasis on collaboration and interdisciplinary working. Unlike more traditional Fellowships, we are encouraging people to make things and be part of an active network of people with extraordinary skills and expertise.

You will be contracted and paid via the University of Bristol but supported by Watershed. Day-to-day the Fellow will be an integral part of the Wounded Buffalo acoustic R&D team with support from the core team and guidance from MyWorld representatives. You will also have access to a network of creative and technical experts to ensure meaningful outcomes.

You can also benefit from a temporary residency at the Pervasive Media Studio in Bristol which hosts a community of over 200 artists, creative companies, technologists and academics exploring experience design and creative technology.

This document contains information about the opportunity and the application process. If you have any access requirements that mean this document does not work for you, please contact Vanessa Bellaar Spruijt on [myworld@watershed.co.uk](mailto:myworld@watershed.co.uk).

This Fellowship is part of the MyWorld IDEAS programme, funded by UKRI.



Image: Pervasive Media Studio



# The Fellowship

Mixed Reality Interaction: Enabling tactile interaction with a digital world.

A practical Fellowship where you will explore innovative methods of using convolution reverb and spectral sound morphing in virtual spaces. This Fellowship aligns with an ongoing R&D project at Wounded Buffalo, supported by MyWorld, which seeks to expand the creative possibilities of sound design by fusing physical acoustic theory with digital signal processing.

We aim to investigate techniques for generating impulse responses from virtual 3D models, potentially drawn from gaming engines or other digital production environments. We will then examine how these virtual acoustics can be manipulated, combined, or 'morphed' with other sounds to form new textures, timbres, and sonic spaces.

We want to work with you to identify new approaches within the realms of spectral modelling, convolution reverb, and sound morphing. Together, we will evaluate current workflows, adapt them for our particular needs, and experiment with novel digital-physical audio pipelines. Your work will inform a new era of interactive audio experiences, supporting deeper immersion and a richer sonic palette.



Image: Wounded Buffalo



# The Fellowship (continued)

**The award: £12,000 for 6 months at 2.5 days/week**

For a payment schedule breakdown please check the [FAQs](#).

## Key Responsibilities (outputs):

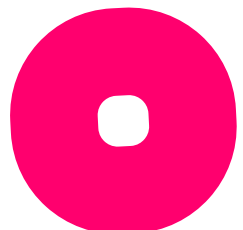
- **Research & Analysis:** Investigate existing approaches to convolution reverb and spectral morphing, with a focus on how 3D virtual models might be leveraged to create new types of acoustic spaces.
- **Prototype & Develop:** Explore techniques for analysing, manipulating, and synthesising sounds through convolution and spectral modelling, showcasing new methods of interactivity and creativity.
- **Implementation & Testing:** Collaborate with the core team to integrate and test your prototypes in realistic production scenarios, gathering feedback to refine the work iteratively.
- **Documentation & Presentation:** Document key learnings, workflows, and technical processes in a clear and accessible manner, and present findings to stakeholders and practitioners, both internally and externally.
- **Collaboration & Knowledge Sharing:** Engage with Wounded Buffalo, MyWorld, and their broader networks, sharing developments promptly to foster an open innovation culture.

## Experience and Skill Set

- **Knowledge of or Proven Interest in Digital Audio:** Familiarity with real-time audio processing, convolution reverb, or spectral analysis and synthesis.
- **Collaborative Mindset:** Comfortable sharing early-stage ideas, offering and receiving constructive critique, and working alongside peers in a creative environment.
- **Rapid Prototyping Abilities:** Capable of devising and testing new ideas or workflows quickly, with an aptitude for problem-solving in uncharted technical areas.
- **Technical Communication Skills:** Able to deliver presentations and updates to both technical and non-technical audiences, ensuring clarity and mutual understanding.
- **User-Centred Approach:** Sensitivity to inclusive design principles and a commitment to making technical processes accessible.

## Desirable experience

- **3D Production Environments:** Experience using or integrating with software such as Unreal Engine, Unity, or equivalent.
- **Advanced Signal Processing Tools:** Familiarity with spectral modelling tools, sound morphing techniques, or other exploratory audio software.
- **Workshop Facilitation:** Experience of organising events, user tests, or workshops to gather feedback from varied participants.



## What do we expect from you?

- You will join as a MyWorld Fellow, embedding yourself within the team at Wounded Buffalo in partnership with MyWorld.
- Some of your time will be spent within our facilities, collaborating directly with our core team and exploring practical applications of your prototypes.
- You will produce work to be tested by Wounded Buffalo and the wider network, documenting outcomes for broader industry learning.
- We value open, collaborative processes. We encourage you to share progress with peer networks and be receptive to new ideas, approaches, and feedback.

## What do you get?

- A grant of £12,000 for 6 months embedded exploration at 2.5 days/week (incl. expenses)
- Access to an interdisciplinary community across MyWorld and the partner universities.
- Support from a Watershed producer (relationship management, contracts, networking, signposting to opportunities, etc.)
- For the duration of MyWorld's programme: Desk space and access to facilities in the Pervasive Media Studio at Watershed in Bristol, connecting you to a vibrant community of artists and creative technologists.
- Access support where relevant and with prior agreement.
- Sharing opportunities for any work made, via Pervasive Media Studio Lunchtime Talks and/or blogs, Watershed First Friday programme, and other opportunities.



Image: Wounded Buffalo

## How to apply

You are invited to answer five questions in an online questionnaire focusing on how you meet the skills and experience for the Fellowship and how you can build care into the process.

Shortlisted applicants will then be invited to interview.

**Apply here for the MyWorld Fellowship in Residence:**

<https://wshd.to/woundedbuffaloapplication>

Please check the eligibility criteria in the [FAQs](#) before applying.

We understand that online forms do not work for everyone. If you would like to apply by alternative means please email Vanessa Bellaar Spruijt on [myworld@watershed.co.uk](mailto:myworld@watershed.co.uk).

## Assessment Criteria

We will assess applications for the Fellowship with the following criteria:

- You will meet all the eligibility criteria outlined in the [FAQs](#).
- How you demonstrate the Experience and Skills set outlined on page 4
- How you demonstrate the Desirable Experience outlined on page 4

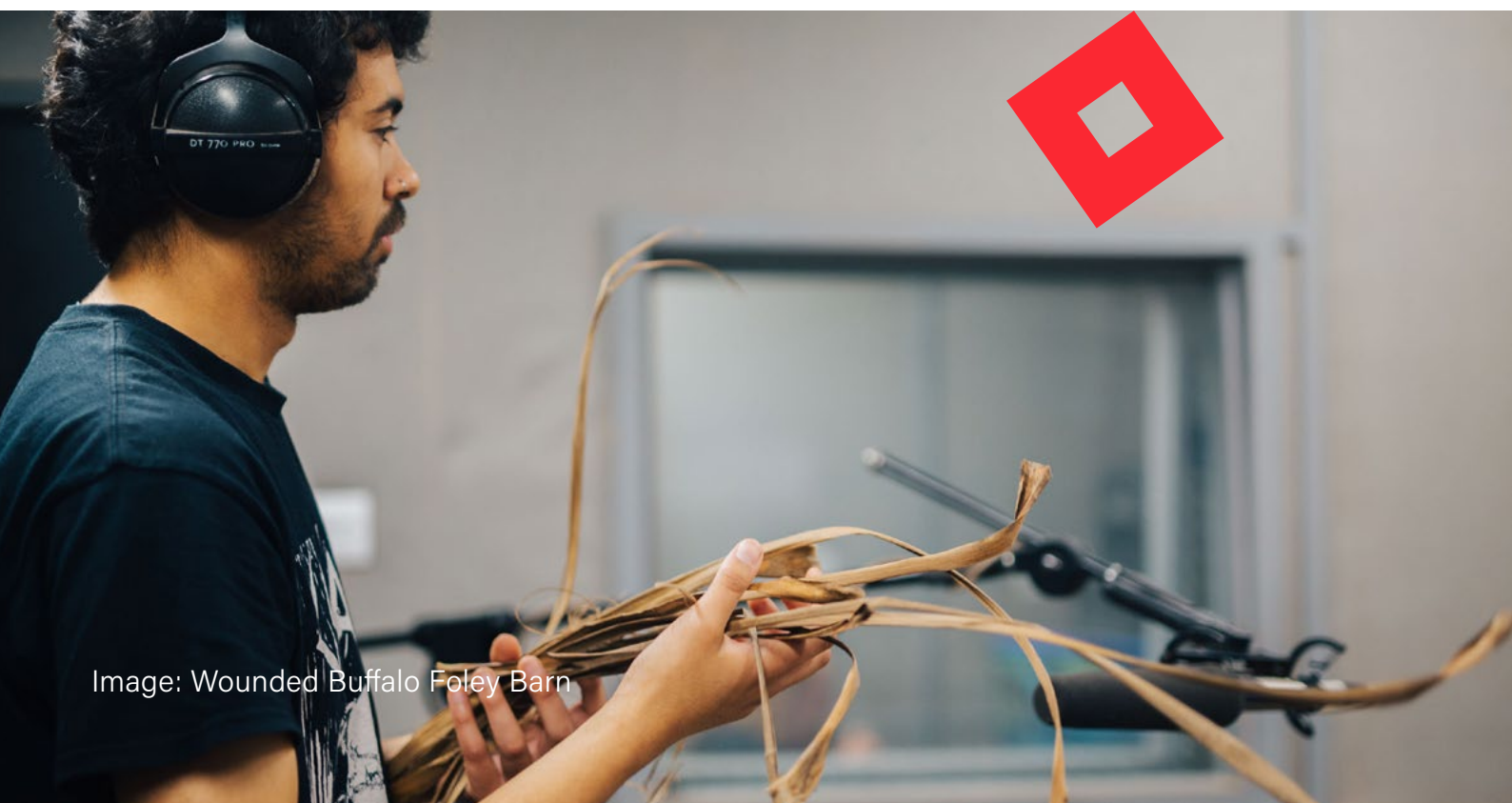


Image: Wounded Buffalo Foley Barn



# Timeline

- Closing date for applications:  
Tuesday 13 May 2025 09.00 a.m. BST
- Applicants will hear from us by end of:  
Thursday 22 May
- Interviews  
Tuesday 3 June
- Contracting:  
June
- Fellowship start date:  
w/c 30 June 2025
- Fellowship end date:  
w/c 22 December 2025



# Talk to Us

We have shared some [FAQs](#) here. If your question has not been answered please contact Vanessa on [myworld@watershed.co.uk](mailto:myworld@watershed.co.uk)

**Application form for Fellowship in residence:**  
<https://wshd.to/woundedbuffaloapplication>

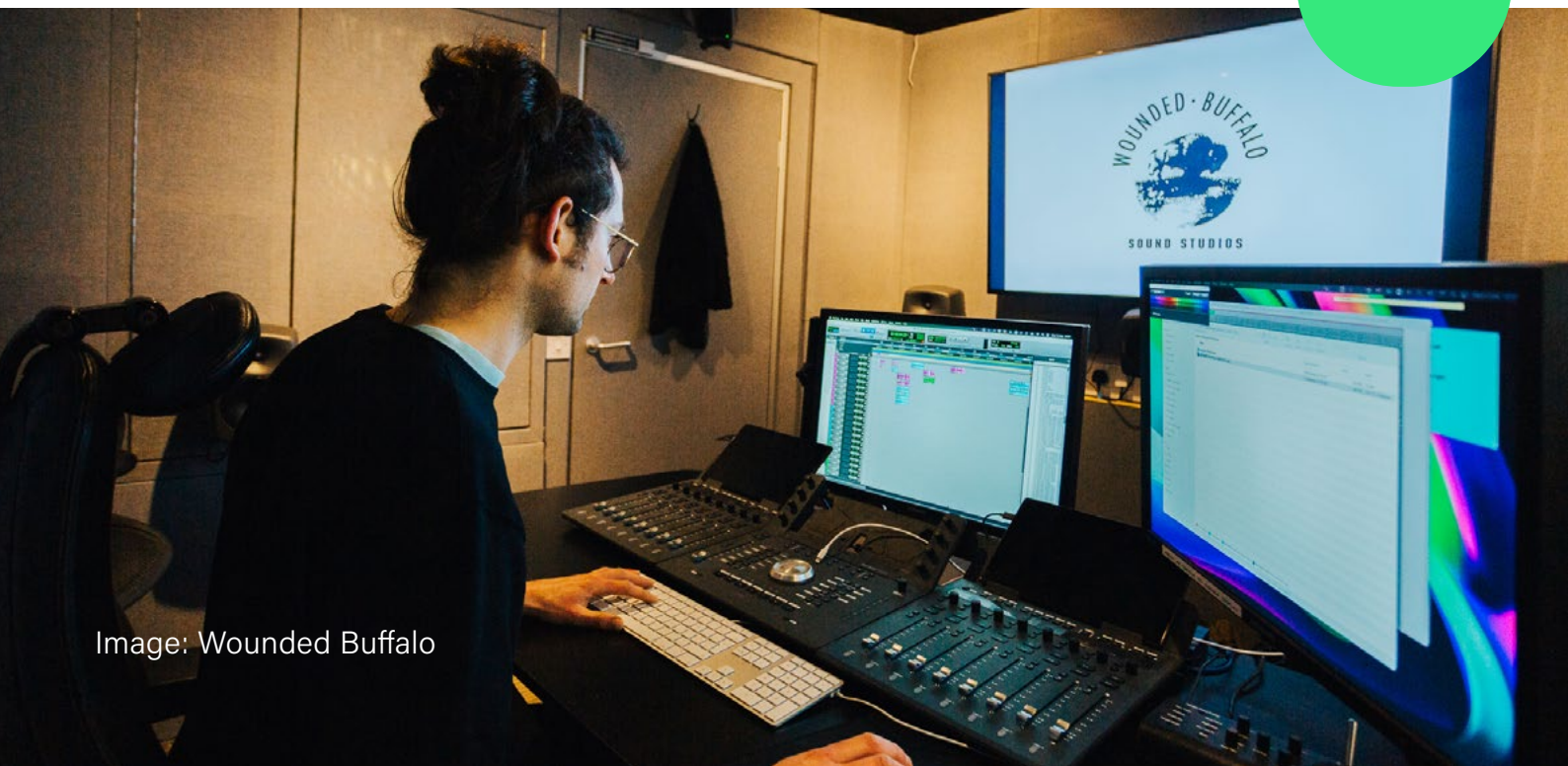


Image: Wounded Buffalo

## About Wounded Buffalo and projects inspiring this Fellowship

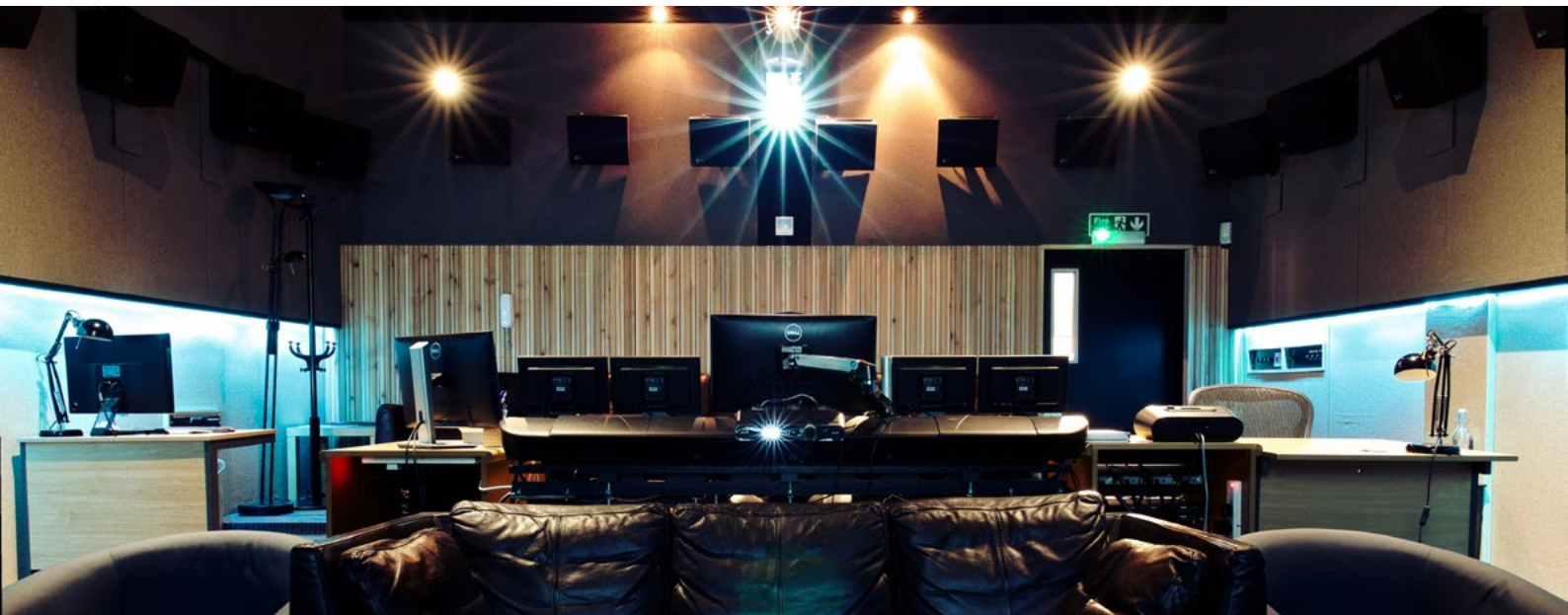
Since its inception, Wounded Buffalo has been setting the standard for audio post-production by innovating and leading in the creation of natural organic soundtracks using cutting-edge technology. Founded in the early 1990s with one of the first AMS/Neve Audiofile systems (Serial number 0002), we have consistently stayed at the forefront of audio excellence.

As new formats like Dolby Atmos become the norm and technologies such as VR and virtual production advance, it is essential for us to build on our legacy. We aim to push into uncharted territories using the latest digital audio technology to craft soundtracks that complement the increasingly imaginative and otherworldly possibilities of photo-real 3D animation and immersive experiences. This commitment ensures that our audio not only matches but enhances the visual spectacle of modern digital media productions.

Right at the beginning, our pioneering spirit was captured with the creation of the Fileffects sound library. This was a collaboration between Max ByGrave, one of our Wounded Buffalo founders, and Paul Hamblin, founder of Boom in London. Utilising the Audiofile and DAT, they created stereo tracks for use with the new Nicam stereo broadcasts in the late 80s and early 90s. The tagline 'Digital sound, naturally' epitomised the groundbreaking nature of Fileffects, a library that is world-famous and still in use today.

Our work on the first series of *Blue Planet* revolutionised how audiences would experience underwater worlds sonically. Following this, *Prehistoric Planet* raised the bar again, bringing to life the creatures of lost worlds with a new level of scientific accuracy and sonic depth.

This Fellowship will be pivotal in exploring where boundaries can be further pushed, charting new frontiers in audio post-production that align with the evolving demands of digital storytelling and immersive technologies.





## About Pervasive Media Studio and Watershed

[Watershed](#) is a cultural organisation focussed on togetherness. We produce accessible and inclusive experiences that fire up the imagination in our venue, online and across the world. We are recognised internationally as a leading centre for film culture, art and technology practice, and talent development programmes. Our values sit at the heart of everything we do, both creative and operational. With an ethos of responsibility and kindness, we produce and deliver support which is more than the sum of its parts.

[The Pervasive Media Studio](#) hosts a brilliant community of over 200 artists, creative companies, technologists and academics exploring experience design and creative technology. We have an open plan studio with a culture of generosity, curiosity and interruptability. We believe that by clustering together people from a broad range of backgrounds, with differing skills, experiences and opinions, all of our ideas get better.

It is a collaboration between Watershed, University of Bristol and UWE Bristol.

## About MyWorld

Watershed and the Pervasive Media Studio are part of a programme called [MyWorld](#) which will showcase the latest advances in digital production and research.

Led by the University of Bristol, the aim of MyWorld is to position the West of England as an international trailblazer in creative media production and technology, through forging dynamic collaborations between academia and industry to progress technological innovation, deliver creative excellence, establish and operate state of the art facilities, offer skills training and drive inward investment, in order to raise the region's profile on the global stage.

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MyWorld is funded through UK Research and Innovation (UKRI) 'Strength in Places fund'

Main Delivery partners: University of Bristol, University of the West of England, University of Bath, Bath Spa University, Watershed, Digital Catapult, Aardman Animations, Lux Aeterna, Esprit Film and Television, Bristol Old Vic and Opposable Games.

