For people suffering from hemophilia, primary immunodeficiencies, and other rare diseases, Kedrion Biopharma Inc. offers a vital lifeline—plasma-derived therapies. Based in Fort Lee, NJ, Kedrion produces a wide range of therapeutic products by fractionating essential components from human blood plasma that has been collected at its 24 plasma centers across the U.S.

Through the demanding and exacting process known as fractionation, Kedrion isolates components, such as albumin, immunoglobulin, clotting factors, and proteins, from human blood plasma. They then use these raw materials to produce and distribute injectable therapies for human treatment worldwide.

To keep its 900 U.S. employees—as well as those at Italian parent company Kedrion S.p.A.—apprised of its business developments, Kedrion regularly streams “Town Halls”, as well as “Lunch & Learns”. These provide in-depth video training on key aspects of its operations, such as treatment tutorials and updates on branded products, regulations, and corporate procedures.

Accessed live or on-demand via the ON24 streaming platform by anyone with a Kedrion Biopharma corporate email address, these data-rich webinars are produced by Forrest McCaleb, Kedrion’s Director of Global Communications, using the robust, intuitive, fully turnkey Wirecast Gear streaming solution from Telestream. Because Wirecast Gear is a stable, dedicated hardware appliance—integrated with Wirecast Pro streaming production software—Forrest can single-handedly generate polished, professional, and visually-engaging streams.

“With Wirecast Gear, all I have to do is plug my cameras and audio sources into the ports on the back of the device and I’m good to go. This gear packs up into a compact fly pack that I can move and set-up quickly at different shooting locations. This live video streaming solution has proven to be reliable, portable, and affordable. That’s the value proposition for us.”

Forrest McCaleb, Director, Global Communications - U.S., Kedrion Biopharma Inc., in Fort Lee, NJ
The Challenge
To fully appreciate why Forrest prizes stability and dependability so highly, we need only consider the quality of his streaming experience prior to his (November 2019) acquisition of Wirecast Gear. As a "one-man band", Forrest frequently found himself enmeshed in the set-up and strike of a very kludgy third-party video streaming workflow. Prior to each stream, he needed to connect different brand video capture cards, converters, and other gadgets via Thunderbolt 3 to his MacBook Pro (2015) laptop.

After moving and setting up all this gear, and wrestling with a mess of cables and connections, he would often find that there was something in the signal workflow—or several points of failure—preventing him from live-streaming an imminent event. It was even more frustrating when the system “crashed” during the live stream, leaving him to troubleshoot the problem while viewers stood by. Eventually, these exasperating snafus drove him to search online for something better.

The Solution
That’s where he discovered Wirecast Gear from Telestream.

“Since Wirecast Gear is a self-contained, purpose-built streaming unit, I now have fewer components and cables to pack-up, move, and set-up than before. And the software that runs on the box lets me pull together a top-flight multi-camera presentation, enhanced with titles, animated graphics, and other video elements. I just preset the camera angles and moves I want, click on the shot, and it pushes out live…”

— Forrest McCaleb

Portability is a key concern for Forrest since space-constraints at Kedrion facilities precludes having a fixed video studio or production control room. Instead, he packs up the gear into customized, padded GPC cases, including:

- The Wirecast Gear, weighing just 15 pounds
- Two video cameras, one of which is a Canon 4K-capable 5D DSLR
- Two wireless lavaliers (lapel mics) and one wireless handheld microphone
- A small external audio mixing board for setting and controlling audio volume prior to input to Wirecast Gear
- Two tripods
- One reference monitor

Forrest takes this “fly pack”, along with two LED panel light stands, to his shooting locations, which include a conference room at Kedrion’s Fort Lee, NJ US headquarters, and the lunchroom at Kedrion’s Melville (Long Island, NY) manufacturing facility. Once at the location, he finds it relatively quick and easy to get everything set-up, with total confidence that the workflow will deliver any streamed event as planned.

After evaluating the three models that comprise the Wirecast Gear product family, McCaleb chose Wirecast Gear 320, a two rack-unit (2RU) chassis that integrates the following built-in components and capabilities:

- 4 HD/SD/3G-SDI camera inputs
- A GPU-optimized encoder
- An Intel UHD graphics card
- Animated 3D graphics
- A NewBlue Titler Live Complete for designing rich, animated title designs
- A 2-channel XLR/TLS Audio I/Os and capture
- NDI Inputs/Outputs for IP-based NDI networking
- A 1 terabyte high-speed storage drive for roughly 20 hours of HD video, plus the 250-gigabyte system drive
- Display monitor outputs
- Telestream Wirecast Pro Live video streaming production software
- Telestream Switch Media utility software for video inspection and quality control

While Wirecast Gear 320 is the mid-range 3G/HD/SD-SDI model, the product line also offers a Wirecast Gear 310 HDMI-only version. And, at the high-end of the product line is the Wirecast Gear 420, which provides five HD-SDI ports, an NVIDIA Quadro graphics card, and support for four simultaneous encodes.

Wirecast Gear prices range from $5,995 up to $8,995.

Each server-grade Wirecast Gear chassis, measuring 16.7 x 12 x 3.5 inches, can be rack-mounted into two standard 19-inch racks, or set-up on a table or console for use as a standalone device. And each unit streams directly to one (or multiple) sites, including Facebook, YouTube, Twitter, or RTMP, while incorporating real-time social media comments.

“With Wirecast Gear, I never have to worry whether I’ve got the right graphics card, the correct type of encoder, sufficient RAM or processing speed, or any other component or specification for the task. Everything I need is already integrated into a box that’s ready to stream with uncompromised quality.”

— Forrest McCaleb
The Workflow

While Wirecast Gear comes with its own keyboard and mouse, Forrest supplements these with Elgato StreamDeck, a third-party hardware controller/keypad with 15 LCD keys that users can program and select to initiate specific actions, such as switching camera shots or rolling in titles or clips.

Held four to five times annually, Kedrion Town Halls feature up to six guests, including the CEO, product brand leads, sales executives, representatives from the plasma business unit, and corporate execs, who together update the workforce on all aspects of the company. Occasionally, patients are invited to share their personal health story about how a particular Kedrion plasma therapy helped treat their condition.

In advance of the stream, Forrest sets up two cameras to provide standard and zoom shots, and during the stream, he switches between video sources, which are arranged in layers within Wirecast Pro. For audio, he either plugs several microphones directly into the ports on the back of the Wirecast Gear device, or he plugs the microphones into a small, third-party audio mixer that then becomes a single audio input to the device. He also uses the integrated NewBlue Titler Live-Complete 3D titling system to design and create lower-third titles for each on-camera person, and then uses Wirecast Pro to transition between them.

The live Town Halls are preceded by a 15-minute video pre-show, which is set-up as a video layer in Wirecast Pro. This MP4 video clip entertains attendees who join the stream up to 15 minutes early, while counting down to the start of the event.

Kedrion video webinars typically draw an audience of 160 viewers who have pre-registered to attend. These participants usually watch the program on one large display at the following Kedrion worksites:

- The Fort Lee, NJ conference room
- The Melville, NY lunchroom
- Kedrion manufacturing plants
- Kedrion plasma collection centers
- The Kedrion plasma business unit in Atlanta, GA
- Facilities in Italy that are operated by the corporate parent company

Using the ON24 virtual meeting platform, the HD video show can be made to fill the screen, or to fit into one of several small windows that comprise the screen layout. These small, on-screen windows can also be filled with PowerPoint presentations, photos, documents, logos, graphics and more, as well as chats, text messages, and social media posts.

Participants can pose their questions to the host in one of three ways.

- Phoning them in prior to the event
- Texting them from their smartphones
- Using the keyboard on the display computer to type them directly into the on-screen chat box

The questions are answered by the on-screen guests and experts during the Q & A segment at the end of the show. After the streamcast is over, the programs may be accessed on-demand via the online platform.

“Early on, we started by hosting very simple Town Halls that were limited to just PowerPoint slides with audio over WebEx. Next, we graduated to streaming more professional video using an ad-hoc slideshows workflow; however, that was cumbersome, unreliable, and a strain on the computer. Today, Wirecast Gear has raised both the quality and reliability of our streamed video events, giving us peace of mind.”

— Forrest McCaleb

Unlike the Town Halls, Kedrion’s Lunch & Learns are designed to teach and train company personnel on all aspects of a particular subject or issue; perhaps Legal wants to talk about complying with correct documentation procedures, or the marketing/brand leads want to inform about the therapeutic benefits of a particular Kedrion product.

The Results

While Wirecast Gear is now the go-to solution that Kedrion Biopharma relies on to live-stream its internal communications events, in the near future Forrest hopes to expand the streaming operations to include external corporate events. One possibility under consideration is conducting webinars to train and update the world’s healthcare professionals about important topics, such as rabies, as well as best practices for using Kedrion plasma-derived human treatments following rabies exposure.

“Given our space-, budget-, and manpower-constraints, Wirecast Gear has proven to be an ideal solution for our Town Halls and Lunch & Learns. We view this thoughtfully designed, turnkey streaming solution as an integral part of our global corporate communications toolbox and strategy.”

— Forrest McCaleb

For more information

Learn more about Kedrion Biopharma Inc and its life-saving plasma services here: https://www.kedrion.us/

Check-out Telestream Wirecast Gear here: https://www.telestream.net/wirecastgear/overview-us.htm