2020-2021 Annual Report
About the Beckley Foundation

The Beckley Foundation is a charitable organisation set up by Amanda Feilding in 1998 to initiate and carry out pioneering research into the therapeutic potential of psychedelics, and to create a scientific base for global drug policy reform. The work of the Foundation relies entirely on donations.

Our Mission

Our aim is to harness the power of science in order to integrate psychoactive substances into society as safe & effective tools to treat a broad range of health conditions and enhance wellbeing.

“What we have done so far, is open the door. However, there is an immense wealth of knowledge to continue mining.” - Amanda Feilding
MESSAGE FROM THE DIRECTOR

The period of this Report was one of the most challenging in recent history, as the coronavirus spread to every corner of the globe, bringing untold devastation and tragedy. However, one of the most important things the pandemic has shown us is the relentless strength of the human spirit and, from a science perspective, it has also shown the extent to which thorough research is vital.

During the lockdowns of 2020 and early 2021, most of the labs that were carrying out Beckley studies were forced to close down or refocus their efforts towards Covid research. Nevertheless, despite the enormous restrictions imposed by the global pandemic, this accounting period has been one of my most productive in recent years. Like a psychedelic, lockdown seems to have shut down the normal controls, but increased connectivity around the world. It has also coincided with an explosion of psychedelic ventures, as people increasingly start to pay attention to the potential benefits of psychedelic compounds, especially with respect to mental health, particularly as the pandemic takes its toll, exacerbating rates of anxiety and depression.

I and the Beckley Foundation have adapted quickly to this new reality, and have been working relentlessly to expand my network of collaborators around the world – including the US, Brazil, Jamaica, the Netherlands, Switzerland, New Zealand, Spain, and Colombia – to develop exciting new research programmes, and associated projects, in order to move forward our mission to provide safe access to psychedelic medicines to the many people in need.

In this period, I have been making great progress in my microdosing research programmes, exploring the use of microdoses of psychedelics for a range of applications. One of the most exciting advances was the publication of ground-breaking research into LSD microdosing from my Beckley/Maastricht collaboration, which showed for the first time that microdoses of LSD promote neurogenesis and neuroplasticity, and significantly improve pain tolerance. This study has shown beyond doubt that LSD microdosing is not just a placebo, and has opened the door to microdosing research, both psychological and physiological, from enhancing wellbeing in the healthy, to improving end-of-life and palliative care, or providing a new treatment option for neurodegenerative illness.

I have also been expanding the range of compounds we are studying to include natural psilocybin, and ibogaine. Along with collaborators from Switzerland and New Zealand, I have been carrying out the first ever formal observational study exploring the therapeutic potential of microdoses of ibogaine for the treatment of Parkinson’s Disease. Preliminary results have been incredibly positive, and I’m working to set up the world’s first clinical study exploring the use of microdoses of ibogaine for the treatment of Parkinson’s in a hospital in Switzerland.

“Like a psychedelic, lockdown seems to have shut down the normal controls, but increased connectivity around the world.”
As natural psilocybin has gained more social acceptance, and been decriminalised in a growing number of cities and territories, I have been expanding my research with the natural form of psilocybin, to take advantage of the new research possibilities that have presented themselves. I am planning to conduct a range of studies with natural psilocybin, including a multi-site study exploring the use of microdoses of psilocybin for palliative and end-of-life care, in territories where that is legally permissible. I have also co-founded a venture to produce standardisable, medical-grade natural psilocybin from mycelium in bioreactor vats, at a fraction of the price of synthetic psilocybin, in order to democratise access, and lower the costs of research.

When I set up the Beckley Foundation over twenty years ago, my aim was to both reform global drug policy and liberate scientific research. These two strands are intrinsically interlinked in a positive feedback circuit, which will create a paradigm shift in the treatment of mental and physical health. This year, I have particularly focused on supporting the global momentum in rescheduling psilocybin by working on several initiatives, including advising and supporting Oregon’s successful Measure 109, to regulate psilocybin in the state, and joining the Advisory Board of a Geneva-based NGO, whose aim is to reschedule psilocybin at the UN.

I have also been considering how best to position the Beckley Foundation within the blossoming of a new global interest in psychedelics. I have been working to develop more sustainable sources of funding, and worked tirelessly to expand the profile of the Beckley Foundation. I have had a rich calendar of seminal meetings, conferences, podcasts, and interviews, including appearing on the national news to discuss the breakthrough psilocybin for depression research that was carried out through the Beckley/Imperial Psychedelic Research Programme, and which allowed me the opportunity to advocate, on a national platform, for the rescheduling of psilocybin in the UK.

I am eager to ensure that the Beckley Foundation continues to play a pioneering role in bringing these valuable new medicines to society. For the last 50 years I have been exploring their multi-faceted benefits, to help cure illness and increase wellbeing. I and the Beckley team are eager to continue our work: from the early formative phase of creating new protocols, to carrying them to the final point of becoming medicines available to the public. We wish to continue adding strategic value at every stage of the journey.

Amanda Feilding
2020 saw the release of some of the most groundbreaking microdosing research since the 1960s, much of which was carried out in collaboration between the Beckley Foundation and Maastricht University.

**BECKLEY/MAASTRICHT RESEARCH PROGRAMME**

**LSD Microdosing for Pain Management**

*The first evidence for the analgesic properties of psychedelics for half a century*

In the mid 1960s, Dr Eric Kast released the earliest evidence of LSD’s potential as a painkiller. For the first time since prohibition put an end to research, the *Beckley/Maastricht Research Programme* have released further evidence in support of this use.

Research participants’ pain tolerance was measured using a Cold Pressor Test, which entails immersing one’s hand in a bath of ice-cold water for as long as possible. The length of time is taken as a measure of pain tolerance and is accompanied by subjective ratings of unpleasantness, pain, and stress.

Results showed that 20 microgram microdoses of LSD significantly improved pain tolerance compared to placebo, at levels comparable to conventional opioid pain medication.

**LSD Microdosing and Neuroplasticity**

The Beckley/Maastricht dose-finding study found elevated levels of brain-derived neurotrophic factor (BDNF) in blood plasma following 5, 10, and 20 microgram microdoses of LSD, with the greater increases following higher doses.

BDNF is a key protein implicated in neuroplasticity and the growth and maintenance of new neurons and synaptic connections. Higher levels are associated with improved cognitive function and mental health, while lower levels are associated with neurodegenerative diseases and mental health conditions.

**Me, Myself, Bye: Furthering our Understanding of the Neurological Mechanisms Associated with Ego-Dissolution**

We carried out the first attempt to assess the acute effects of psilocybin on glutamate levels in humans using Magnetic Resonance Spectroscopy. Glutamate is the major excitatory neurotransmitter in the mammalian central nervous system, and the glutamate system is the main regulator of neuroplasticity in the brain.
Psilocybin was found to increase glutamate concentration in the medial prefrontal cortex (mPFC) and decrease it in the hippocampus, and this increase was related to participants’ ratings of anxious ego-dissolution. The observation that negatively perceived ego death is caused by hyperactivity within the mPFC could pave the way to the development of bio-feedback techniques of monitoring mPFC activity in order to facilitate a positive experience of ego-dissolution, which appears to be essential for long term positive outcomes of psychedelic-assisted therapy.

Psilocybin was also found to cause a decrease in glutamate concentration within the hippocampus. This finding may also have relevant therapeutic applications, as too much glutamate in the hippocampus, which can be a consequence of chronic stress, can be toxic and cause damage to hippocampal cells, leading to neurodegenerative disorders.

BECKLEY/BRAZIL COLLABORATION

LSD Enhances Cognitive Performance and Neuroplasticity

Amanda set up this first LSD translational research programme in collaboration with top researchers at leading institutes in Brazil, in order to investigate the various important aspects of LSD’s mechanisms of action, and shed light on its therapeutic potential, thereby guiding us towards future clinical trials.

The initial set of results from these translational studies constitute a major breakthrough for LSD research, with the first clear and multi-level evidence of LSD’s ability to enhance neuroplasticity, learning and memory. These ground-breaking results are currently awaiting publication in a major scientific journal.
BECKLEY/ICEERS

We already know of the tremendous benefits that psychedelics can have for people facing a terminal diagnosis. The experience of ego-death appears to reconcile people with the notion of death, and to reduce, if not dissipate entirely, the fear attached to the limitation of one’s existence.

Less research, however, has been invested in helping those who are left behind to cope with the loss of a close relative. Here, too, psychedelics appear to play a profound and beneficial role.

Between 2015 and 2019, Amanda and the Beckley Foundation collaborated with ICEERS to conduct research at the Temple of the Way of the Light in Iquitos, Peru, examining the long-term effects of indigenous Shipibo ayahuasca ceremonies on quality of life, wellbeing, and health, as well as anxiety, depression, grief, and PTSD.

So far, two research papers have been published using data from this study. The first analysed the benefits of ayahuasca for grief. Bereaved participants who participated in indigenous Shipibo ayahuasca ceremonies were assessed before and at several time points after the ceremonies. The results suggest that the ceremonial use of ayahuasca has therapeutic value by reducing the severity of grief.

Acceptance and decentring both mediated the improvement of grief symptoms. This work suggests the potential value of further studies evaluating the benefits of psychedelic-assisted therapy for prolonged grief.

The second article examined the ceremonial use of ayahuasca to promote wellbeing. We examined Western participants’ wellbeing and quality of life over the course of one year following participation in a program of Indigenous Shipibo ayahuasca ceremonies at the Temple of the Way of Light in Peru.

Results showed significant increases in all measures (psychological well-being, subjective well-being, spiritual well-being, and quality of life) at all time points (3 months, 6 months, and 12 months after their stay at the retreat). The extent of these changes was mostly large, with self-acceptance being the subscale which was improved the most.

These results suggest that Indigenous healing work with ayahuasca has value for the improvement of long-term wellbeing and quality of life in people from a Western cultural background.

In August 2020, Amanda and everyone at the Beckley Foundation were shocked to hear of the sudden passing of Dr Jordi Riba. Dr Riba, an esteemed Beckley Foundation Scientific Advisor, was the co-founder and Principal Investigator of the Beckley/Sant Pau Research Programme, based in Barcelona, Spain, which, was set up by Amanda in 2013 to carry out research into the neurological and cognitive effects of ayahuasca, releasing the most research papers on the Amazonian psychedelic brew of any research team in the world. Jordi’s legacy will live on through his contributions to the field of psychedelic research, and he is greatly missed.
Scientific Papers published during the period April 2020-March 2021


Pharmacokinetics and Pharmacodynamics of Lysergic Acid Diethylamide Microdoses in Healthy Participants (2020), Holze, F., Liechti, M. E., Hutten, N. R. P. W., Feilding, A. et al., *Clinical Pharmacology & Therapeutics*


Me, myself, bye: regional alterations in glutamate and the experience of ego dissolution with psilocybin (2020), Mason, N. L., Kuypers, K. P. C., Müller, F., Feilding, A., et al., *Neuropsychopharmacology*

After decades of prohibition, we are beginning to see a greater receptivity to the decriminalisation of psychedelics in countries and jurisdictions around the world, evidenced by the changing landscape of global drug policy. Amanda Feilding and the Beckley Foundation are proud to have contributed to several movements, including Oregon’s successful Ballot Measure 109, which will allow for the administration of legal psilocybin therapy in the state within the next few years, as well as the ongoing efforts to decriminalise natural psychedelics in California. In her capacity as a member of Mind Medicine Australia’s Advisory Panel, Amanda also supports their campaign to reschedule psilocybin and MDMA and facilitate psychedelic research in Australia.

In recognition of her contributions to global drug policy reform, Amanda has been invited to join the Advisory Board of a new, Geneva-based NGO, which will launch later this year. In this role, she will provide expert advice to the group in an effort to reschedule psilocybin under the 1971 UN Convention on Psychotropic Substances.

In May of 2021, Amanda Feilding was invited to take part in BBC’s Newsnight to discuss the study undertaken at Imperial College, comparing the efficacy of psilocybin and escitalopram (alongside therapy) for the treatment of depression. This study was a follow-on to the breakthrough psilocybin for depression study carried out by the Beckley/Imperial Research Programme back in 2016. On this national platform, Amanda called on the government to reschedule psilocybin, and argued in favour of more research into psychedelics.

The Coca-Cocaine and Derivatives report, which is now entitled ‘The Cocaine Papers’ was completed towards the end of this period, and we are now assessing the best publication and dissemination routes for this unique resource. The aim of the report, commissioned by Amanda Feilding under the Global Initiative for Drug Policy Reform, is to open up and advance the discourse on alternatives to prohibition of coca/cocaine, in the same way the BF Global Cannabis Commission’s 2008 report Cannabis Policy: Moving Beyond Stalemate did for cannabis.
In lieu of a normal conference season, 2020 saw a proliferation of virtual alternatives. Amanda had been invited to several conferences, but in the wake of Covid-19, many of these were either postponed or cancelled. In June, Amanda was one of the few keynote speakers at the Prohibition Partners 2020 Live event, sharing a pre-recorded virtual talk entitled *Lessons Learned from 50 Years of Psychedelic Drug Policy Reform* with over 1600 delegates who took part in this two-day event.

The Beckley Foundation were proud sponsors of the Interdisciplinary Conference on Psychedelic Research 2020 (ICPR 2020), a multidisciplinary conference hosted in Amsterdam in September. The conference featured leading experts in psychedelic research and therapy, psychiatry, neuroscience, psychology, and anthropology. Amanda’s keynote speech, *At the Frontiers: An Introduction to the New Beckley Foundation Research Programme*, alongside Rick Doblin, the director of MAPS, was one of the most popular talks at the conference, and was viewed over 2,500 times.

Also in September, Amanda had the opportunity to contribute her expertise on psilocybin-assisted therapy as a treatment for depression in a panel discussion following a screening of the new film *Fantastic Fungi*, organised by The Scientific and Medical Network.

Dr Valerie Bonnelle, our Scientific Officer, participated in two webinars at the Société Psychédélique Française with a talk entitled: *Amanda Feilding, the Beckley Foundation and psychedelic research*; and another on Psychedelic Studies.

In November 2020 Valerie also gave a talk at the Congres français de psychiatrie (CFP2020) on *Psychopharmacological and cognitive mechanisms of psychedelic therapies.*
MEDIA SUPPORT AND PUBLICITY

This year we achieved great coverage on leading platforms across the globe. Amanda and the Beckley Foundation were quoted and cited on nearly 100 articles in printed and online media amplifying the outreach of Amanda’s message and emphasising our research and policy recommendations. In what became a very busy year in the media outreach of the Beckley Foundation, Amanda was featured in articles by Platinum Magazine, Vice, The San Francisco Chronicle, BBC Travel, and Forbes, which has a daily readership of 5 million people.

Amanda was also invited to take part in numerous podcasts, reaching a combined audience of thousands of listeners and shares. Below we include a section of the highlights of the year in printed media, podcasts, and film:

PODCASTS AND TV

 Hamilton’s Pharmacopeia - Ultra LSD [February 2021]

- For the finale of fourth and final series of Hamilton Morris’ critically acclaimed VICE documentary, Hamilton’s Pharmacopeia, Amanda hosted Hamilton and his team at Beckley Park to discuss her long history of research into LSD and non-ordinary states of consciousness.

Psychedelics Today - The Beckley Foundation: Changing Minds through Psychedelic Research Podcast. [April 2020]

INBodied Life Podcast Lauren Taus - Expanding Connectivity | A Conversation with Amanda Feilding from the Beckley Foundation. [June 2020]

The Age of Mental Wellness - The New Health Club with Anne Philippi | Amanda Feilding Psychedelics once were the food of gods. [July 2020]

Conversations with Susie Pearl | Amanda Feilding. [September 2020]

Better Thinking with Nesh Nikolic | Amanda Feilding on the Clinical Applications of Psychedelics [December 2020]

Field Tripping with Ronan Levy: Medicine For The Soul | Ronan Levy talks with Amanda Feilding [March 2020]
A RAPIDLY GROWING DIGITAL PLATFORM

Our social media pages remain among the most widely followed sources of trusted information on psychedelic science and drug policy reform in the world, with our content reaching over half a million people each month. Our number of followers grew at a rate of approximately 13% this year and include well-known academics, journalists, politicians, and influencers. In addition, the Beckley Foundation’s online blog provides additional insights and analysis on areas of interest to our supporters, with articles like: *Is microdosing just placebo? Insights from the Beckley Foundation’s research programme; Anxiety, Psychedelics and neuroplasticity;* and *Can LSD microdosing reduce pain perception?*

Our Communications Team continues to create fresh and innovative videos to inform our audiences and to provide attractive and current content for our website and social media channels.

Other members of the team also participated in podcasts, interviews and media opportunities whenever Amanda was unable to take part, in order to maximise the Beckley Foundation’s presence. Dr Valerie Bonnelle did a live interview for the programme *La Méthode Scientifique* on France Culture; and also provided comment in several minor media outlets. Jon Sharp, our Communications Officer, also participated in two podcasts providing an insight into the work of Amanda Feilding and the research of the Beckley Foundation.

PR

Towards the end of 2020, the Beckley Foundation employed the services of Long & Elgar, a young and dedicated PR company with expertise in promoting creative individuals and cultural events. Long & Elgar also work with brands like Gucci, Christie’s New York and other independent firms and individuals. Throughout the year they have helped procure interesting media opportunities for Amanda and the Foundation, and their support and advice have been invaluable in the few months they have been working with Beckley.
STAFF AND DIVERSITY

As was the case for all organisations, the Beckley Foundation had to adapt to the difficulties imposed by the Covid-19 pandemic, introducing social distancing measures in the office, mandatory mask wearing, and frequent hand sanitising at sanitiser stations. Following government regulations, team members worked from home in order to reduce the spread of the virus, and returned to the office when restrictions were lifted. We are proud to say that throughout the pandemic we continued to maintain the pre-covid standard of attendance, close communication and high production rate within the team.

Unfortunately, in the spring of 2020, the Covid-19 pandemic took its toll, and the Beckley Foundation experienced difficulties. With the funds of the Beckley Foundation running low, we joined the government’s furlough scheme to maintain one of our five employees, Thomas McLachlan, the Development Officer, who after a period of three months of furlough went on to pursue other opportunities.

Amanda was quick to adapt to the new reality of remote work, and utilised the online platforms to meet with scientists, physicians, entrepreneurs, and business leaders around the world to develop her innovative programme of psychedelic research.

During the financial year 2020-2021, we welcomed three new members of staff to the Beckley Foundation. Matias Lopez-Portillo Garcia-Lopez, Jon Sharp, and William Smith, have brought in new skills and a fresh perspective to our diverse, multi-cultural team. Matias joined the Beckley Foundation to help navigate the next stage of its development and brings experience from a background in public policy, business and consulting. Prior to joining the Foundation, he was a founder and director of a technology and public policy think-tank focused on Latin America, and was the VP of Business Strategy for a legal tech start-up.

Below we enclose a full list of our employees:

Amanda Feilding, Executive Director

Thomas McLachlan, Development Officer (until July 2020)

Matias Lopez-Portillo Garcia-Lopez, Development Officer (from July 2020)

Dr Valerie Bonnelle, Scientific Officer

Vivian Kear, Office Manager and Personal Assistant

Sasha Frost, Communications and Content Manager

Jon Sharp, Communications Officer

William Smith, Scientific Assistant to the Director & Communications (from February 2021)
PLANS FOR THE FUTURE

SCIENCE

We will continue to broaden our range of studies and develop new research projects as the year progresses. We look forward to sharing further developments and updates on these and other exciting activities as they arise.

Amanda’s future programme of research will include:

- A range of clinical studies to evaluate the therapeutic potential of LSD microdosing as it relates to pain, mood and cognition.
- A new microdosing research programme focusing on neurodegenerative illness and palliative care
- An innovative remote research programme with the leading remote research platform in the US for microdosing
- A series of exploratory research studies comparing various compounds in order to further our understanding of their mechanisms of action, as well as their similarities and unique signatures.

IBOGAINE FOR PARKINSON’S

Amanda is working with researchers in Switzerland and the Netherlands to develop a new research programme investigating the therapeutic efficacy of low doses of ibogaine for the treatment of Parkinson’s disease and its associated symptoms. Ibogaine, a novel tryptamine isolated from the root bark of the Tabernanthe iboga shrub of West Central Africa, has been used as a stimulant and entheogen by Bwiti and Pygmy cultures for generations, and has been indicated as a treatment for a range of addictions. Owing to its ability to induce increases in GDNF levels in the brain, it may hold potential for the treatment of Parkinson’s.
QUANTIFIED CITIZEN

Amanda and the Beckley Foundation will collaborate with Quantified Citizen and world-famous mycologist, Paul Stamets, among others, on the largest microdosing study yet carried out anywhere in the world, which will allow us to recruit potential participants from a very large pool in order to address specific research questions, including the interaction between microdosing and meditation, microdosing’s effects on neurodegenerative disorders and microdosing for pain management.

POLICY

Psilocybin Open Letter. Amanda Feilding has planned a campaign for the rescheduling of psilocybin from Schedule 1 to Schedule 2, but during this period the launch of the campaign was delayed due to the Covid pandemic.

The aim of the letter is to gather signatures from prominent politicians, academics and influencers. It already has the backing of Drug Science (formerly the Independent Scientific Committee on Drugs) as well as a number of MPs and senior scientists from major universities. The letter will be addressed to the Prime Minister and published in major newspapers. It will be accompanied by a petition campaign with the aim of gathering the 100,000 signatures required to secure a debate in the House of Commons.

Due to delays in launching the campaign, we are exploring options to increase its impact and visibility, including collaborating with a German scientist, who has developed inexpensive psychedelic compound testing kits, in order to launch the letter alongside a complementary harm reduction campaign.

Roadmaps to regulation. Two other reports in the series Roadmaps to Reform: Cannabis, and Psychedelics, will be updated due to the considerable amount of new research and developments for both cannabis and the psychedelics all around the world. Our aim is for these reports to be completed in the next period.
FUNDRAISING STRATEGY

As the psychedelic sector has opened up to psychedelic ventures and for-profit investment, it has been increasingly difficult to raise philanthropic funding, as more potential funders move away from supporting the sector with purely philanthropic donations to having the option of investing in a range of ventures, with the possibility of a return. Nevertheless, through our director Amanda Feilding’s leadership, the Beckley Foundation has sought to diversify its funding strategy, to try to take advantage of the new influx of capital, and to harness the potential of for-profit investment.

We have hired a new development officer to help build a diverse and sustainable funding model, while continuing with our core fundraising efforts, reaching out to previous supporters of the Foundation, and targeting the director’s wide network of potential donors, from charities to HNWIs. During this period, we were able to secure one of the largest single donations to the Beckley Foundation to date by demonstrating the value for money that our funders have received from their donations to the Beckley Foundation, and the disproportionate impact that our director and the Foundation’s work has had in bringing about the ‘Psychedelic Renaissance’ and creating a paradigm shift in the treatment of mental health.

Our director has also been working tirelessly to build what is probably the most exciting programme of research, and associated projects, of any organisation in the psychedelic sector. The Beckley Foundation has worked to communicate this exciting progress through a series of online and offline materials and activities, and we have also hired a new communications officer to build online engagement through our social media channels, through quality content and events, such as art auctions carried out in collaboration with recognised and respected artists in the sector, the creation of an online ‘library’, and updating our online shop. As always, our director has been involved in a relentless schedule of events, conferences and interviews, which has seen a huge increase in the recognition and visibility, especially in the UK and the US, of the impact that our director’s groundbreaking work has had, all of which has seen an increase in small donations.

We have also supported initiatives such as the North Star Ethics Pledge to promote ethical behaviour and reciprocity in new psychedelic ventures. Several start-ups and funds which Amanda has been working with, in recognition of her work and the value that she brings as an advisor to any psychedelic venture, have donated a portion of their shares or future profits to the Beckley Foundation, which we hope will bear fruit in the medium term.
ANNUAL EXPENSES

FUNDING DISTRIBUTION

- Scientific Research
- Policy Costs
- Education and Comms
- Running Costs
- Fundraising

18% 18% 16% 21% 21% 21% 14% 5% 6% 40% 41% 18% 16% 2019 2020 2021
Thank You to Our Funders

We would like to thank all our generous private donors and institutional funders. Without your support, the essential work of the Beckley Foundation, which continues to push the limits of our knowledge by conducting the best possible independent research and daring to explore new and taboo territories without consideration of profit, would not be possible.

We are particularly grateful to Omar A. Fayed, The Betsy Gordon Foundation, Cosmo Feilding Mellen, Local Giving and Cynthia Phillips. And special thanks to the following generous private donors: Manoj Nathwani, Alexandra Long, Michael Good, Christian Saenger, Alexandre Weber, Adam Wood.
The Beckley Foundation Scientific Advisory Board includes leading international experts on the topics of consciousness, neuroscience, biochemistry, psychiatry and psychology.

"Amanda has made significant contributions to the field of psychedelic research"

Prof David E. Nichols