Tonya Coulthard

499 Oak Park Dr.
London, ON, Canada N6H3N6
+1-647-523-0658
Tonya@TonyaCoulthard.com

Work Experience

Product Manager – Director of Scientific and Corporate Development – Senior Account Manager, Northeast Region

Nov. 2016 – May 2024; Scintica Instrumation Inc.; London, ON

I joined Scintica prior to it's official formation in 2017. Initially representing a single manufacturer, the focus was on sales and marketing activities with the goal of linking scientists with quality research tools to further advance their work. Over the nearly 8 years that I spent at Scintica, being the first employee alongside the founders, I helped the company grow and expand to represent over 15 manufacturers with projected revenues of $15,000,000 in 2024. The company not only grew in manufacturers we represented, but also in people, number of offices, and geographical territories where we were active.

Product Manager

Oct. 2014 – Aug. 2016; CIMTEC; London & Toronto, ON

The Centre for Imaging Technology Commercialization (CIMTEC) is a technology development company; in my role as Product Manager I worked with our partners to define novel software and/or hardware projects. Through complex discussions about the specific biological problem to be solved, we worked together to design and implement a product solution focused around medical imaging technologies. The end result of the projects were a novel software and/or hardware solution which could then be used to help researchers better investigate or solve their biological problems.

Applications and Product Specialist

Aug. 2011 – Oct. 2014; Aspect Imaging; Toronto, ON

In my role as product and applications specialist I collaborated with many researchers around the world with the goal of developing and expanding the applications of our compact MRI system. These applications focused exclusively on small animal disease models, and included applications in which gadolinium based contrast agents were used to study perfusion.

While at Aspect I focused on building a training program for our biology-focused customers, allowing them to quickly begin imaging using a modality which had previously been operated almost exclusively by physicists. These systems delivered a significant improvement in imaging performance, animal handling, and ease of use for our customers.

Applications Specialis – Applications Team Leader

July 2006 – May 2011; VisualSonics; Toronto, ON

I joined Visual Sonics at quite an early stage in their growth. My initial role was to help develop the microbubble contrast agent line of consumables, and work with the team to effectively test and train both our internal team, as well as customers. Quickly I began expanding on all areas of ultrasound imaging in preclinical research and had the opportunity to learn a great deal about various disease models through my extensive work with key opinion leaders in their fields. Further, I worked with the VP of Business Development to further expand our reach across overseas markets by engaging, supporting, and training a collection of distribution partners. Finally, I managed the team of Applications Specialists located across both North America and Europe.

Research Assistant Co-Op Positions During BSc. Degree

2002; Canadian Science Centre for Human and Animal Health; Winnipeg, MB

Prion diseases and the associated pathology and disease transmission in mouse models of disease.

2001; Merck Frosst; Montreal, QC

Asthma and the effects of various agonists and antagonists in guinea pig model of disease.

2000; WM Keck Center for Transgene Research – University of Notre Dame; Notre Dame, IN

Tuberculosis and the effects of disease pathology in transgenic mouse models involving the blood coagulation pathway.

1999; Bethany's Hope Laboratory – University of Western Ontario; London, ON

Mitochondrial disorders and associated pathologies including metachromatic leukodystrophy.

Education

University of British Columbia

2003 – 2005; MSc. Experimental Medicine; Vancouver, BC

MSc. Thesis – Investigation of growth factor upregulation in the small airways of mice following exposure to cigarette smoke. This work involved extensive animal work to prepare the models and harvest the tissues. Samples were collected using laser capture microdisection, and subsequently analyzed using real-time PCR. Conventional histology and immunihistochemical techniques were used to confirm the molecular biology findings.

University of Waterloo

1998 – 2003; BSc. Honors Biochemistry Co-Op; Waterloo, ON

Key Skills

Preclinical Imaging:

High frequency ultrasound imaging of a diverse array of anatomical targets, and disease areas; MR imaging using a compact permanent magnet; Optical imaging; Dual energy x-ray absorptiometry (DEXA/DXA) imaging.

Business Development:

Worked to identify, assesses, and onboard many of the manufacturers we represented at Scintica. Worked to initiate and expand the network or world-wide distributors at Scintica, Aspect, and Visual Sonics.

Product Development:

Worked closely with the engineering team at Aspect in Israel, and our customers, to provide feedback, suggestions, and design ideas to help improve the utility of the system, and overall image quality and performance. Performed similar activities while at Visual Sonics, playing a key role in the design, development, and release of the Vevo 2100.

People Management:

For some time I managed the large team of Product Managers at Scintica, and an international team of Applications Specialists while at Visual Sonics; I actively worked to develop my management and communication skills.

Presentation:

One of the primary responsibilities at Scintica, Aspect, and Visual Sonics was to present our product portfolio to a wide variety of audiences, including students, world-class scientists, as well as others working in the industry.

Demonstration and Training:

Another primary responsibility throughout my tenure at Scintica, Aspect, and Visual Sonics was to demonstrate the majority of our products to potential customers, and follow-up with post-sales training activities; as well as to be the primary person to train and on-board the new employees as they joined the team.

Quality Management System:

While at CIMTECI worked with the Quality Manager to develop, review, and implement policies, procedures, and templates to achieve certification for medical device design, development, and manufacturing (ISO 13485), and successfully managed the first project to pass through the newly implemented system to successfully pass our certification audit.

Qualifications

Mouse Handling and Care
Nov. 2020; University of Western Ontario

Gas Anesthsia - Mouse
Feb. 2021; University of Western Ontario

Intraperitoneal & Subcutaneous Injection - Mouse
Feb. 2021; University of Western Ontario

Cervical Dislocation awith Anesthesia
March 2023; University of Western Ontario

Responsible Conduct of Researech
May 2023; Collaborative Institutional Training Initiative (CITI)

Working with Rats in Research Setting
May 2023; Collaborative Institutional Training Initiative (CITI)

Use of Controlled Substances in Basic and Animal Research
May 2023; Collaborative Institutional Training Initiative (CITI)

Working with Small Animals
May 2023; Collaborative Institutional Training Initiative (CITI)

Bloodborne Pathogens for Lab Workers
May 2023; Collaborative Institutional Training Initiative (CITI)

Animal Use Laws and Regulations Exam
October 2023; University of Washington

AODA – ON: Accessibility Training for Employees
December 2021; HR Covered

Publications

Seshadri M, Sacadura NT, Coulthard T. Monitoring Antivascular Therapy in Head and Neck Cancer Xenografts using Contrast-Enhanced MR and US imaging. *Angiogenesis*. 2011. Dec; 14(4):491-501.

Zhang Q, Yang H, Kang, SJ, Wang Y, Wang GD, Coulthard T, Grossniklaus HE. In Vivo High-Frequency Contrast-Enhanced Ultrasound of Uveal Melanoma in Mice: Imaging Features and Histopathologic Correlations. *IOVS. 2011*. April 52:2662-8.

Needles A, Arditi M, Rognin NG, Mehi J, Coulthard T, et al. Nonlinear Contrast Imaging with an Array-Based Micro-Ultrasound System. *Ultrasound in Med. & Biol. 2010*. 36(12):2097-106.

Andonian S, Coulthard T, Smith AD, Singhal PS, Lee BR. Real-time Quantification of Renal Ischemia Using Targeted Microbubbles: in-vivo measurement of P-Selectin Expression. *J Urology*. 2009. Mar; 23(3):373-8.

Churg A, Tai H, Coulthard T, Wang R, Wright JL. Cigarette smoke drives small airway remodeling by induction of growth factors in the airway wall. *Am J Respir Crit Care Med*. 2006. Dec 15; 174(12):1327-34.

Presentations and Posters

Hesterman JY, Coulthard T, Viszoczki B, Zeng J, Klose AD, Jin C, Silva M, Hoppin J. Three-Dimensional Bioluminescence Reconstruction using Compact 1 Tesla MRI. *World Molecular Imaging Congress 2012, poster*.

Zheng J, Lindsay PE, Foltz WD, Coulthard T, Jaffray D. Use of Small Animal MRI and Cone-Beam CT for Image-Guided Radiotherapy of Orthotopic Cervical and Prostate Tumors in Mice. *American Association of Cancer Research meeting 2012, poster*.

Barlow, NJ, Wilson D, Rimsky R, Wachsmuth L, Coulthard T, Ying X. Translational Imaging of an Injectable Poly-L-Lactic Acid Derma Filler (Sculptra Aesthetic). *Society of Toxicology meeting 2011*, poster.

Coulthard T, Needles A, Theodoropoulos C, Foster S. High-Frequency Nonlinear Contrast Imaging of Subcutaneous Tumors - an Assessment of Perfusion and VEGFR2 Expression. *American Association of Cancer Research meeting 2010*, poster.

Needles A, Coulthard T, Mehi J, Bilan C, et al. Nonlinear Molecular Imaging with a Linear Array Based Micro-Ultrasound System. *World Molecular Imaging Congress meeting* 2009, presentation.

Coulthard T, Zheng X, Conney AH. High Frequency Ultrasound Imaging for Prostate Tumor Research. *American Association of Cancer Research meeting 2009*, poster.

Sun J, Coulthard T, Theodoropoulos C. Quantifying Microvascular Hemodynamics: Measuring Relative Kidney Perfusion with Micro-Ultrasound. *Society of Molecular Imaging meeting 2008*, poster.

Coulthard T, Andonian S, Lee B. The Utility of Micro-Ultrasound and Contrast Agents in the Assessment of a Mouse Model of Renal Ischemic Reperfusion Injury. *Experimental Biology 2008*, poster.

Foster FS, Coulthard T, Bilan C, Hirson D, et al. Three-Dimensional Contrast Enhanced Micro-Ultrasound: Visualization and Quantification of Relative Perfusion in 3D Volume. *American Association of Cancer Research meeting 2008*, poster.