

Iain Sutherland Macdonald

OVERVIEW

- Diverse portfolio of national and international experience in industry capacity-building, marketing, training and development, applied research management and economic development
- Multifaceted understanding of North America's mass timber sector
- Innovator with a track record of creative solutions in economic development, skills development and applied research
- Effective team leader, communicator and collaborator, experienced in successfully managing diverse teams of employees, contractors and partners across organizational and cultural boundaries

PROFESSIONAL HISTORY

Director, TallWood Design Institute (TDI), Corvallis, Portland and Eugene, OR (2016 to present)

I currently manage a unique interdisciplinary institute involving the Colleges of Forestry and Engineering at Oregon State University and the College of Design at the University of Oregon. TDI exists to foster and facilitate innovation in wood-based construction through applied research carried out in direct partnership with industry stakeholders throughout the mass timber supply chain. TDI also offers Masters courses, non-credit certificate programs and professional development opportunities in many forms to architects, structural engineers, manufacturers, construction professionals and building code officials. Our role provides economic development leadership to the State of Oregon and plays a prominent role in national R&D efforts. As founding Director, my role has involved onboarding and training a diverse technical and outreach team, bringing a \$12M technical lab onstream, developing academic and professional relationships throughout the US and internationally, jump-starting a diverse outreach program, and securing significant political support, grants and other financial contributions.

Principal, Making Waves Consulting (2001 to present)

I have provided a wide range of consulting services to industry, the public sector and NGOs, including: conducting peer reviews of mass timber designs; authoring proposals for major government grants; evaluating the adaptive capacity of communities to respond to climate change in Jamaica and Lesotho; creating climate change training and development programs, and; conducting train-the-trainer activities.

Managing Director, Centre for Advanced Wood Processing, University of British Columbia, Vancouver BC (2007-2016)

As Director of Canada's National Centre for Advanced Wood Processing, I led training and development activities that involved technical staff, researchers, external consultants and academics across the world. I managed a state-of-the-art laboratory facility that provided training, product development and prototyping services to manufacturers. We created and ran a diverse range of training, outreach and technical support activities. I provided administrative, financial, strategic and operational leadership to Centre staff and oversaw the planning and marketing of applied R&D and technical assistance services to the private sector.

Associate Director, Centre for Advanced Wood Processing, University of British Columbia, Vancouver BC (2001-2007)

Developed and delivered major training programs for wood products manufacturers, coordinated international skills training projects and managed a network of external relationships with educational institutions, industry associations and stakeholders throughout Canada and internationally.

Events Manager, Centre for Advanced Wood Processing, University of British Columbia, Vancouver BC (1999-2001)

Planned and marketed training programs, technical forums and international conferences for wood industry audiences throughout Canada and the USA. Negotiated sponsorship agreements and supplier contracts, recruited content experts, supervised and evaluated staff.

Director of Export Sales, Merit Kitchens, Vancouver BC (1996-1998)

Developed and serviced export sales accounts in Asia, conducted sales and marketing activities in Japan and other overseas markets. Designed and monitored promotional campaigns, created advertising copy and communications collateral. Conducted market research and competitor analyses, led new product development efforts for specific offshore end users and managed after-sales service functions.

Outbound Department, Japan Travel Bureau International, Vancouver BC (1995-1996)

Coordinated and marketed wholesale and retail sales of customised tours to Japan with a focus on group and corporate travel. Managed high-volume corporate accounts.

Co-Director, Aida Residential English Seminar, Okayama, Japan (1993 and 1994)

Planned and managed annual seven-day residential language seminar. Created innovative educational content, designed event program, hired, supervised and evaluated teaching staff.

Lecturer, English Faculty, Sanyo University, Okayama, Japan (1992-1994)

Devised and delivered international education program with focus on communicative skills. Created original curriculum and oral evaluation system, advised Japanese faculty on college program development.

English Language Consultant, Okayama, Japan (1992 -1993)

Established and ran language instruction company while pursuing own Japanese language studies. Created and utilized original instructional materials.

President, Association of the Japan Exchange and Teaching Program, Okayama Chapter (1991-1992)

Worked with education officials and foreign instructors to maximize effectiveness of JET Program in Okayama region, Japan. Organized and chaired educator meetings, edited newsletter and provided support services and professional development opportunities for foreign instructors. Planned and conducted onboarding seminars for new instructors, served as official Okayama representative at national conferences.

English Teacher, Japan Exchange and Teaching (JET) Program, Okayama, Japan. (1990-1992)

Conducted English communication classes, assisted in development of classroom-based and electronic curriculum, acted as teaching consultant. Established annual residential English immersion program.

ADDITIONAL PROFESSIONAL ACTIVITIES

Innovation and Entrepreneurship Fellow, Oregon State University (2017 – present)

Chair, Oregon Mass Timber Industry Supply Chain Analysis Project, Portland, Oregon (2020)

Conference Chair, Oregon Mass Timber Industry Summit, Salem, Oregon (2019)

Conference Steering Committee, Industrialized Wood-based Construction Conference, Boston, MA (2018)

Conference Steering Committee, International Mass Timber Conference, Portland, Oregon (2016, 2017)

Member, International Programs Advisory Committee, College of Forestry, Oregon State University (2018 – present)

Director and Past Chair, Human Resources Sector Council for the Advanced Wood Products Manufacturing Industries (WMC) (board member 2007- 2017 Chair 2014-2016)

Chair, Faculty of Forestry Learning Technologies Committee, University of British Columbia (2005 – 2009)

Member and Chair, Programme Advisory Committee, Bachelor of Technology in Manufacturing Programme, British Columbia Institute of Technology (2004 – 2009)

Business Development Consultant, Nipponart.com (2002)

Freelance Translator – General and Technical Translation Services, Torikoshi & Macdonald (1997-1998)

SELECTED PROJECTS

Seedlings to Shelters (2021)

TDI team lead on multi-organization project to produce high-volume affordable modular timber housing utilizing West Coast restoration fiber.

REACTS Consortium for Research on Engineering, Architecture and Construction of Timber Structures (2020-present)

Set up a first-of-its-kind industry consortium to fund, plan and drive innovation in timber construction, involving 17 leading architecture, engineering and construction firms from North America and Europe.

Oregon Mass Timber Supply Chain Analysis (2020)

Carried out a detailed analysis of Oregon's supply chain to identify growth opportunities and constraints and inform future state policy decisions and actions.

Certificate Program in Mass Timber Manufacturing and Construction, Oregon State University (2018-present)

Creating a flexible blended learning program for workforce development covering digital design and fabrication, quality assurance, and mass timber construction.

Climate Change Action Training in Jamaica (2013 and 2015)

Undertook consultative needs analysis process and created training packages on climate change adaptation and mitigation for Jamaican communities and students. Led training-of-trainers workshops (Funding: US Agency for International Development).

Wood Products Processing Industry Capacity-Building in South Africa (2004-2010)

Managed a \$2M Canadian International Development Agency-funded project to develop new workforce training capacity for university, polytechnic and industry training institutions in South Africa. Coordinated Canadian and South African teams, managed finances, operations, monitoring and reporting. Developed a suite of e-learning and classroom courses for B.Sc. degree and industry training use, contributed to National Diploma curriculum, provided faculty member training, leveraged funding from public sector and other agencies, negotiated exchange agreements, created recruiting and marketing strategies, trained recruitment officers. Led outreach activities in Ghana, Morocco and Kenya to develop delivery partners throughout Africa.

National Management Skills Training Program for Canada's Wood Products Manufacturing Industry (2008-9)

Led a multi-institutional project team to develop a modular e-learning/mobile learning program and a factory-floor cross-training program to train entrepreneurs and management-track employees (Funding: Human Resources & Social Development Canada).

Industrial Design Education for the South African Furniture Industry (2007-10)

Coordinated industry-driven project to create Diploma program in industrial design and training of in-country instructors in partnership with Emily Carr University, Canada (Funding: Forest Industries Education & Training Authority, South Africa).

SELECTED CONFERENCE PRESENTATIONS

The Evolving North America Mass Timber Sector. Keynote address, Forest Products Society 2020 Annual Conference, Online (2020)

Mass Timber Design and Construction: What we're Learning from Research. American Institute of Architects Annual Conference, Las Vegas, NV (2019)

From Gastown to Stumptown: Rise of the Pacific Northwest as North America's Mass Timber Hub. International Mass Timber Conference, Portland, OR (2019)

Wood Construction: The Role of Research and Education in Overcoming Barriers to Growth. Keynote address, UN Economic Commission for Europe/FAO Annual Conference on Forestry and Forest Products, Vancouver, British Columbia (2018)

Addressing Evolving Skills for Industrialized Construction. Industrialized Wood-based Construction Conference, Boston, MA (2018)

From Fiber to Buildings: Understanding the Design and Performance of Mass Timber Structures. CONSTRUCT 2018, Long Beach, CA (2018)

Building Bigger, Taller and Smarter with Wood. Leadership Forum, International Woodworking Fair, Atlanta, GA (2018)

Mass Timber Construction in the USA: Lessons from Recent Research. Building Innovation 2018 – Sustain, Strengthen, Secure, National Institute of Building Sciences Annual Conference, Washington DC (2018)

Building Bigger, Taller and Smarter with Wood. Keynote Address, UN Economic Commission for Europe/FAO Annual Conference on Forestry and Forest Products, Warsaw, Poland (2017)

Earthquake-Resilient Mass Timber Construction. Keynote Address, Expo Edifica 2017, Santiago, Chile (2017)

The Role of Universities in Supporting Mass Timber Market Development. Oregon Mass Timber Summit, Portland, Oregon (2017)

Canada's Forest Industry. Testimony to the Standing Committee on Natural Resources, House of Commons, 41st Parliament of Canada (2015)

Integrating Traditional and Technology-based Approaches to Training in the Workplace: the Current State of Play in North America. 10th International Conference on Technology, Knowledge & Society, Madrid, Spain (2014)

Marketing Using the Internet and Social Media. Presentations for industry at various conferences, Toronto, Vancouver, Victoria and Kamloops (2011-12)

Evaluating the Viability of Mobile Learning to Enhance Management Training. MLearnCon, San Diego (2010)

Using Mobile Internet Technology to Support and Deliver Lifelong Learning. 9th UBC Learning Conference, Vancouver, Canada (2009)

Mobile Learning for Management and Technical Education. Pacific Northwest Wireless Summit, Vancouver, Canada (2009)

Using E-learning to integrate Professional and Undergraduate Learning: Creating Pedagogical and Operational Synergies Online. International Conference on Learning, University of Illinois, Chicago (2008)

Tailoring Training Delivery to Manufacturers' Needs. Recruiting, Training and Retaining the Right Employees Conference, Toronto, Canada (2007)

E-Learning as a Corporate Training Tool: Pedagogical Approaches and Learner Support. e-Learning Africa Conference, Nairobi, Kenya, (2007)

Strengthening the Forestry and Wood Products Manufacturing Sector through E-learning: a Case Study of International Cooperation in Industry-Focused Education. e-Learning Africa Conference 2006, Addis Ababa, Ethiopia, (2006)

Implementing a Mixed-Mode Course in Advanced Manufacturing Education: Challenges, Benefits and Lessons Learned. E-Strategy Conference, University of British Columbia, Vancouver, Canada (2005)

Lifelong Learning in the Advanced Wood Processing Industry. Human Resources in the Advanced Wood Products Sector – Issues and Possible Solutions Conference, Kitchener, Canada (2003)

SELECTED PUBLICATIONS

Macdonald, I. (2016). Integrating Traditional and Technology-based Approaches to Training in the Workplace: The Current State of Play in North America. *Journal of Technologies in Society, Volume 12, Issue 1, February 2016, pp.13-24.*

Macdonald, I. & Chiu, J. (2011). Evaluating the Viability of Mobile Learning to Enhance Management Training. *Canadian Journal of Learning & Technology, 37 (1).*

Macdonald, I. & Evans, P.D. (2010). Integrating and Enhancing Professional and Undergraduate Education using Blended Learning. In J. Westover (Ed.), *Training the Next Generation of Knowledge Workers: Effective Secondary Education and Workplace Learning Practices to Drive Enhanced Workforce Competitive Advantage in a Global Economy.* (253-267). Common Ground Publishing, Victoria, Australia.

Macdonald, I., Bullen, M. & Kozak, R. (2010). Learner Support Requirements for Online Workplace Training in the South African Furniture Industry. *Journal of Asynchronous Learning Networks 14, (3).*

Evans, P., Macdonald, I., Rypstra, T., Mortimer, J. and Wessels, B.(2010). South Africa's wood processing industry education strategy: a north south partnership to develop a globally competitive workforce for the 21st century. *International Wood Products Journal 1 (1).*

Macdonald, I. & Evans, P.D. (2008). Integrating Professional and Undergraduate Education using Blended Learning: Creating Pedagogical and Operational Synergies Online. *International Journal of Learning 15 (8), 85-94.*

Macdonald, I., Bullen, M. & Kozak, R. (2007). Identifying Effective Pedagogical Approaches for Online Workplace Training: A Case Study of the South African Wood Products Manufacturing Sector. *International Review of Research in Open and Distance Learning 8 (3).*

Various articles on training and development, *Crosscut Magazine* (2001 – 2004).

Cohen, D. & Macdonald, I. (2001). Trends and Changes in Japanese Building Regulations, *CMHC, Ottawa.*

Cohen, D., Macdonald, I. & Kozak, R. (2001). The Japanese Distribution System for Finished Building Products: In Transition. *Forest Renewal BC, Victoria, BC.*

EDUCATION

- **Master of Science**, (Focus area: technologies to support professional and workforce training)
University of British Columbia, 2006
- **Certificate in Internet Marketing**, University of British Columbia, 2001
- **Diploma of Marketing Research Society of Great Britain**, 1990
- **Bachelor of Arts with Honours, Marketing**, University of Stirling, Scotland, 1990

OTHER PROFESSIONAL DEVELOPMENT

- **University of British Columbia** –various professional development workshops: SEO, Social Media Marketing; Advanced HTML Concepts & Practices; Introduction to Facilitative Leadership; Project Management, and others (1999 – 2011)
- **Member, Toastmasters International** (2002-2004)
- **Member, International Internet Marketing Association** (2001-2003 and 2011-2013)
- **Centre for Teaching and Academic Growth, UBC**: various seminars on instructional design, improving face to face learning with technology, learning management systems, online tools and instructional methods (2002-2005)
- **Japanese Business Letter Writing course**, Simon Fraser University (1996)
- **International Japanese Proficiency Examinations**, advanced levels (1991 & 1993)

LANGUAGES

- **English, Japanese** - fluent
- **German** - basic

**Committee on Agriculture
U.S. House of Representatives
Information Required From Nongovernmental Witnesses**

House rules require nongovernmental witnesses to provide their resume or biographical sketch prior to testifying. If you do not have a resume or biographical sketch available, please complete this form.

1. **Name:** Iain Macdonald _____

2. **Organization you represent:** TallWood Design Institute, Oregon State University _____

3. **Please list any occupational, employment, or work-related experience you have which add to your qualification to provide testimony before the Committee:** _____

I am the Director of the TallWood Design Institute at Oregon State University and was previously Managing Director of the Centre for Advanced Wood Processing in BC, Canada. I have also chaired the Wood Manufacturing Council in Canada and have worked in roles in or supporting the wood products manufacturing industry for 25 years.

4. **Please list any special training, education, or professional experience you have which add to your qualifications to provide testimony before the Committee:** _____

Aside from the abovementioned experience I hold an Honors degree in Marketing and a Master of Science degree in workforce skills development using technology-based learning

5. **If you are appearing on behalf of an organization, please list the capacity in which you are representing that organization, including any offices or elected positions you hold:**

I am appearing as a representative of the TallWood Design Institute, a department within the College of Forestry at Oregon State University _____

PLEASE ATTACH THIS FORM OR YOUR BIOGRAPHY TO EACH COPY OF TESTIMONY.