Date of Document June 12, 2017

**CURRICULUM VITAE**

**Alexander C. Mackinnon Jr MD, PhD**

**Associate Professor**

**Department of Pathology**

**Division of Administration**

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**PLACE OF BIRTH:** Orlando, FL

**CITIZENSHIP:** U.S.A.

**EDUCATION:**

1985 - 1987 The Hotchkiss School, Lakeville, CT

1987 - 1991 B.A., University of Colorado, Boulder, CO

1993 - 1994 M.S., Northwestern University, Evanston, IL

1996 - 2004 Ph.D., University of Illinois, Urbana, IL

1996 - 2004 M.D., University of Illinois, Urbana, IL

**POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:**

*University of Chicago Medical Center, Department of Pathology*

6/2004 - 6/2007 Resident, Anatomical Pathology

7/2007 - 6/2008 Postdoctoral Fellow, Cardiovascular Pathology

7/2008 - 6/2010 Clinical Fellow, Molecular Genetic Pathology

**FACULTY APPOINTMENTS:**

*Medical College of Wisconsin, Milwaukee, WI, Department of Pathology*

7/2010 - 6/2015 Assistant Professor

6/2015- Present Associate Professor

**RESEARCH ADMINISTRATIVE APPOINTMENTS:**

*Medical College of Wisconsin, Milwaukee, WI, Department of Pathology*

7/2010 - Present Director, Clinical and Translational Research Core Laboratory

**HOSPITAL STAFF PRIVILEGES:**

*University of Chicago Medical Center*

6/2004 - 6/2010 Housestaff

*Froedtert Memorial Lutheran Hospital*

7/2010 - Present Attending Physician

**SPECIALTY BOARDS AND CERTIFICATION:**

|  |  |  |
| --- | --- | --- |
| Board Certified | Issue Date | Expiration |
| Anatomical Pathology | 11/2007 | 12/2017 |
| Molecular Genetic Pathology | 11/2009 | 12/2019 |
| Anatomical Pathology, Maintenance of Certification (Passed) | 10/2016 | 12/2027 |
| Molecular Genetic Pathology, Maintenance of Certification (Passed) | 10/2016 | 12/2027 |

|  |  |  |  |
| --- | --- | --- | --- |
| Licensure |  | Issue Date | Expiration |
| Illinois License |  | 2008 | 2014 |
| Wisconsin Licenses |  | 2010 | None |

**AWARDS AND HONORS:**

1995 Star Tech Award, Abbott Labs

1998 Instructors Ranked in Top 10% for Excellence in Teaching University of Illinois

1998 Chairman, 10th Annual Medical Scholars Program Spring Research Symposium

1999 First Place, Outstanding Student Poster Presentation, 39th Annual Midwest Development Biology Meeting

1999 - 2001 Predoctoral Fellowship, American Heart Association

2000 First Place, Outstanding Oral Presentation, 40th Annual Midwest Development Biology Meeting

2001 Summer Research Fellowship, University of Illinois College of Medicine

2002 - 2004 Medical Scholars Program Class Representative, Elected Position

2006 Travel Award, American Society of Nephrology Annual Meeting

2007 - 2009 Cardiovascular Sciences Training Grant, Dr. Elizabeth McNally, PI

2008 Bursary Award, XXVII Congress of the International Academy of Pathology

2009 Trainee Travel Award, The Intersociety Council for Pathology Information

2009 Young Investigator Award, Association for Molecular Pathology

2011 Interdisciplinary Cancer Research Postdoctoral Fellowship Award, "The Prognostic Significance of SmgGDS-mediated Signaling Pathways in Breast Cancer"

2015 Technologist Award, Association for Molecular Pathology, “Myxoinflammatory Fibroblastic Sarcoma: Association of t(1;10) Translocations in a Cohort of 49 Cases by Fluorescence in Situ Hybridization” (Presented by Stephanie Puetz (Springborn))

2016 Archer Research Challenge Grants

**MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:**

2004 – Present, United States and Canadian Academy of Pathology (USCAP)

2006 – Present, Association for Molecular Pathology (AMP)

2007 – Present, College of American Pathologists (CAP)

2014 – Present, American Society of Clinical Pathology (ASCP)

**EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:**

*Ad hoc reviewer*

2010 – Present, Journal of Clinical Pathology

2012 – Present, British Journal of Infectious Disease

2016 – Present, PLoS One

*Editorial Board*

2011 – Present, Annals of Diagnostic Pathology

**NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:**

*Association of Molecular Pathology*

01/2010 – 12/2010 Junior Member (elected), Training and Education Committee

05/2010 – 11/2011 Ad hoc Member (appointed), Training and Education Committee

11/2012 – 11/2015 Member (elected), Membership Affairs Committee

06/2015 – 11/2017 Member (elected), Program Committee (Solid Tumor Subdivision Representative)

*The American Society of Clinical Pathology*

06/2014 - Present Molecular Pathology Section, Pathologist Recertification Individualized Self-Assessment Examination Committee (PRISE)

**RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:**

*Peer Review*

Title: Role of Pat-4 in Muscle Assembly

Source: American Heart Association

Role: Principal Investigator

Dates: 7/1999 - 6/2001

Direct Funds: $50,000

Title: Identification and Characterization of Smad4 Gene Targets During Embryonic Murine Atrioventricular Valve Formation

Source: PHS Grant 5T32HL07381

Role: Postdoctoral Research Fellow

Dates: 7/1/2008-6/30/2009

Principle Investigator: Ivan P. Moskowitz, M.D., Ph.D.

Program Director: Elizabeth M. McNally, M.D., Ph.D

Title: Genetic Determinants of Gene Expression Phenotype

Source: NIH R01

Role: Co-Investigator (3%)

PI: Liang Wang

Dates: 7/2012 - 7/2014

Direct Funds: $637,767

Title: The Role of the Protein Kinase VRK1 in Human Breast Cancer

Source: Advancing a Healthier Wisconsin

Role: Co-Investigator (50%)

PI: Paula Traktman

Dates: 7/2013 - 12/2014

Direct Funds: $25,000

**INVITED LECTURES/WORKSHOPS/PRESENTATIONS:**

*Local*

1. Mackinnon, A.C., pat-4 is the C. elegans Homologue of Integrin-Linked Kinase, 40th Annual Midwest Development Biology Meeting, Urbana, IL, 4/1999

2. Mackinnon, A.C., A Funny Thing Happened on the Way to the Rectum: Some Brief Comments Regarding PAT-4/ILK and Disease, University of Illinois College of Medicine Research Symposium, Urbana, IL, 6/2003

3. Mackinnon, A.C., Biomarkers in Pancreatic Cancer, Department of Pathology Grand Rounds, University of Wisconsin, Madison, WI, 9/6/2012

4. Mackinnon, A.C., Department of Pathology Clinical & Translational Research Core Lab (CTRL): Description of Service and Workflow Available for the MCW Research Community, Cancer Cell Biology Research Forum, Medical College of Wisconsin, 2/2013

*Regional*

1. Mackinnon, A. C. pat-4 Mediates Integrin Signaling During Muscle Assembly in C. elegans, Midwest C. elegans Meeting, Minneapolis, MN, 6/2000

2. Mackinnon, A.C. Protein Interactions in C. elegans Muscle Attachment Structures Studied in vivo by Fluorescent Resonance Energy Transfer (FRET), Midwest C. elegans Meeting, St. Louis, MO, 6/2002

3. Mackinnon, A.C. Molecular Diagnostics of Gastrointestinal Pathology, 3rd Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 5/2010

4. Mackinnon, A.C. Molecular Pathways in Solid Tumors: Prognostic and Predictive Biomarkers in Clinical practice, 4th Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 9/11/2011

5. Mackinnon, A.C. Biomarkers in Pancreatic Cancer, 5th Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 9/14/2012

6. Mackinnon, A. C. Biomarkers in Pancreatic Cancer, Department of Pathology Grand Rounds, University of Wisconsin, Madison, WI, 9/2012

7. Mackinnon, A. C. Update on Molecular Diagnostic Testing of Lung Cancer, 6th Annual Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 9/2013

8. Mackinnon, A. C. Molecular Diagnostics of Thyroid Cancer, Illinois Society of Cytology Spring Meeting, Schaumburg, IL, 5/2014

9. Mackinnon, A. C. Update on Clinical Application of Next-Generation Sequencing Cancer Panels, 7th Annual Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 9/2014

10. Mackinnon, A. C. Update on Molecular Diagnostics of Solid Tumors, 7th Annual Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 9/2014

11. Mackinnon, A. C. Implementation of Next Generation Sequencing, 8th Annual Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 9/2015

12. Mackinnon, A. C. Pathological, Molecular, and Clinical Correlations in Solid Tumors, 9th Annual Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 10/2016

13. Mackinnon, A. C. Update on PD-L1 inhibitors in Non-Small Cell Lung Cancer, 9th Annual Midwestern Pathology Conference: Update Course in Surgical Pathology, Milwaukee, WI, 10/2016

14. Mackinnon, A.C., Pathological, Molecular and Clinical Correlation in Solid Tumors: A Case Studies Based Approach. WSP 2016 Annual Conference: Practical Molecular Pathology for the General Pathologist, Madison, WI, 11/52016. (Organizer for Conference)

*National*

1. Mackinnon, A.C., PAT-4 binds UNC-112 and Functions as an Adapter During Muscle Assembly,, 13th Biennial International C. elegans Meeting, Los Angeles, CA, 6/2001

2. Mackinnon, A.C., Molecular Pathways in Solid Tumors: Prognostic and Predictive Biomarkers in Clinical practice, 16th Annual Meeting, Community Pathologist Outreach Program, Current Applications of Molecular Pathology: Real Time Updates and Case Studies, San Jose, CA, 10/2010

3. Mackinnon, A. C., Approaching Specimen Tracking in Translational Research Core Laboratories, 102nd United States and Canadian Academy of Pathology Annual Meeting, Baltimore, Maryland, 3/2013

4. Mackinnon, A. C., Specimen Handling and Processing in Lung Cancer, American College of Chest Physicians: Chest 2013, Chicago, IL, 10/2013

*International*

1. Mackinnon, A.C., Diagnostico Molecular de Cancer de Pancreas, XI Congreso de la Federacion de Anatomia Patologica de la Republica Mexicana, A.C., Mexico City, Mexico, 11/2012

2. Mackinnon, A.C., Patologia Molecular de Cancer de Pulmon, XI Congreso de la Federacion de Anatomia Patologica de la Republica Mexicana, A.C., Mexico City, Mexico, 11/2012

3. Mackinnon, A. C., General Review of Molecular Techniques, Seminario Tomas Velaquez, Mexican Association of Pathology, Ixtapan de la Sal, Mexico, 5/2014

4. Mackinnon, A. C., Molecular Diagnostics of Lung Cancer, Seminario Tomas Velaquez, Mexican Association of Pathology, Ixtapan de la Sal, Mexico, 5/2014

5. Mackinnon, A. C., Molecular Diagnostics of Thyroid Cancer, Seminario Tomas Velaquez, Mexican Association of Pathology, Ixtapan de la Sal, Mexico, 5/2014

6. Mackinnon, A. C., Molecular Diagnostics of Pancreas Cancer, Seminario Tomas Velaquez, Mexican Association of Pathology, Ixtapan de la Sal, Mexico, 5/2014

7. Mackinnon, A. C., Microsatellite Instability Testing, Seminario Tomas Velaquez, Mexican Association of Pathology, Ixtapan de la Sal, Mexico, 5/2014

8. Mackinnon, A.C., New Developments in Genomic Mechanisms in Pediatric and Adult Soft Tissue Tumors. XXVII World Congress of the World Association of Societies of Pathology and Laboratory Medicine, Cancun, Mexico, 11/2015.

9. Mackinnon, A.C., Co-Moderator for Solid Tumor Presentations. AMP 2016 Annual Meeting, Charlotte, NC, 11/2016.

10. Mackinnon, A.C. Hainan National Medical University. Haikou, Hainan Province, China. Establishing and Clinical and Translational Research Lab at an Academic Medical Center in the USA. 3/15/2017.

**COMMITTEE SERVICE:**

*Medical College of Wisconsin*

2010 – Present Pancreatic Cancer PPG Application Planning Committee,

2010 – Present Executive Member, Tissue Bank Utilization Committee, Pathology

2011 – Present Leadership Committee, Pathology

2011 – 2016 Internal Review Board

2012 – 2013 Residency Committee, Pathology

2013 Member Faculty Search Committee, Pathology

2014 – Present Campus Wide Shared Resources Oversight Board, Office of Research

2014 – Present Research Resource Operations Committee, Office of Research

2014 – Present Froedtert & Medical College of Wisconsin Cancer Center Clinical Program Leadership Committee

2014 – Present Medical College of Wisconsin Cancer Center Leadership Committee Meeting

2016 Medical College of Wisconsin Bioinformatics Committee

2016 – 2017 Faculty Search Committee, Head of Human Molecular Genetics Center

2016 – Present Department of Pathology Outreach Advisory Board

2016 – Present Leader, Molecular Oncology Steering Committee

2016 Forensic Science Center Academic Exploratory Committee

2016 – Present Breast Cancer PPG Application Planning Committee

2017 – Present Oral Cavity Cancer PPG Application Planning Committee

**MEDICAL COLLEGE TEACHING ACTIVITIES:**

*Medical Student Education*

9/2010 - 2011 M1 New Curriculum, Gastrointestinal Module

2013 – Present M2 Discovery Curriculum, Symptoms Module

2014 – Present M2 Discovery Curriculum, Gastrointestinal Module

2014 – Present M2 Discovery Curriculum, Cardiology Module

2015 – Present M2 Discovery Curriculum, Neoplasia Module

*Resident and Fellow Education*

7/2011 - Present Director, Molecular Pathology Rotation

**MCW STUDENTS, FACULTY, RESIDENTS AND CLINICAL/RESEARCH FELLOWS MENTORED:**

*Thesis Committee*

Bryce A. Schuler, MD, PhD, Medical College of Wisconsin, 2015, PhD Thesis Committee

Mathew Lasowski, MS, Medical College of Wisconsin, 2016, MS Thesis Committee

*Medical Students*

Isaac Lloyd, Medical College of Wisconsin, 5/2012 - 8/2012, Research Mentor

Ashley Walker, Medical College of Wisconsin, 5/2012 - 8/2012, Research Mentor

Aristotle Leonhard, Medical College of Wisconsin, 1/2017-5/2018, Clinical Advisor

*Clinical/Research Fellows*

Arturo Gonzalez-Luevano, MD, Medical College of Wisconsin, 3/2011 - 10/2011, Supervising Mentor

Luisa Gomez, MD, Medical College of Wisconsin, 9/2011 - 10/2012, Supervising Mentor

Karen Arispe, MD, Medical College of Wisconsin, 5/2012 – 8/2016, Supervising Mentor

Lisley Calixto De Araujo, MD, Medical College of Wisconsin, 12/2012 - 3/2013, Supervising Mentor

Kala Schilter, PhD, Medical College of Wisconsin, 7/2013 – 6/2014, Postdoctoral Mentor

Huiya Huang, MD, Medical College of Wisconsin, 9/2015 – 5/2016, Supervising Mentor

Lloyd Christiansen, MD, Medical College of Wisconsin, 6/2017 – 5/2018, Supervising Mentor

**EXTRAMURAL STUDENTS, FACULTY, RESIDENTS, AND CLINICAL/RESEARCH FELLOWS MENTORED:**

*Undergraduate Students*

Rudolfo Villarreal-Calderon, University of Montana, 6/2011 - 9/2011 Mentor: FASEB MARC Undergraduate Summer Research Program

*Medical Students*

David Suster, Tulane University Medical School, 6/2011 Supervising Mentor

**PROGRAMMATIC DEVELOPMENTS:**

*Clinical Programs*

2010 – Present Medical College of Wisconsin Clinical and Translational Research Lab (CLIA and CAP accredited)

2016 – Present Medical College of Wisconsin Pathology Reference Lab (Outreach Pathology Clinical Service Line)

**BIBLIOGRAPHY**

*Refereed Journal Publications/Original Papers*

1. Claude G. Lerner, Anne Y. Chiang Saiki, A. Craig Mackinnon, and Xiaoling Xuei. 1996. High throughput screen for inhibitors of bacterial DNA topoisomerase I using the scintillation proximity assay. Journal of Biomolecular Screening 1:135-143.
2. Steven D. Pratt, Xiaoling Xuei, Alexander C. Mackinnon, Angela M. Nilius, Dena M. Hensey-Rudloff, Ping Zhong, and Leonard Katz. 1997. Development of a coupled VanA/VanX assay: Screening for inhibitors of glycopeptide resistance. Journal of Biomolecular Screening 2:241-247.
3. Mackinnon AC, Qadota H, Norman KR, Moerman DG, Williams BD. C. elegans PAT-4/ILK functions as an adaptor protein within integrin adhesion complexes. Curr Biol. 2002 May 14;12(10):787-97. PubMed PMID: 12015115.
4. Jagadeeswaran R, Surawska H, Krishnaswamy S, Janamanchi V, Mackinnon AC, Seiwert TY, Loganathan S, Kanteti R, Reichman T, Nallasura V, Schwartz S, Faoro L, Wang YC, Girard L, Tretiakova MS, Ahmed S, Zumba O, Soulii L, Bindokas VP, Szeto LL, Gordon GJ, Bueno R, Sugarbaker D, Lingen MW, Sattler M, Krausz T, Vigneswaran W, Natarajan V, Minna J, Vokes EE, Ferguson MK, Husain AN, Salgia R. Paxillin is a target for somatic mutations in lung cancer: implications for cell growth and invasion. Cancer Res. 2008 Jan 1;68(1):132-42. doi: 10.1158/0008-5472.CAN-07-1998. PubMed PMID: 18172305; PubMed Central PMCID: PMC2767335.
5. Ma PC, Tretiakova MS, MacKinnon AC, Ramnath N, Johnson C, Dietrich S, Seiwert T, Christensen JG, Jagadeeswaran R, Krausz T, Vokes EE, Husain AN, Salgia R. Expression and mutational analysis of MET in human solid cancers. Genes Chromosomes Cancer. 2008 Dec;47(12):1025-37. doi: 10.1002/gcc.20604. PubMed PMID: 18709663; PubMed Central PMCID: PMC2583960.
6. Gordon IO, Sitterding S, Mackinnon AC, Husain AN. Update in neoplastic lung diseases and mesothelioma. Arch Pathol Lab Med. 2009 Jul;133(7):1106-15. Review. Erratum in: Arch Pathol Lab Med. 2009 Nov;133(11):1733. PubMed PMID: 19642737.
7. Gordon IO, Cipriani N, Arif Q, Mackinnon AC, Husain AN. Update in nonneoplastic lung diseases. Arch Pathol Lab Med. 2009 Jul;133(7):1096-105. Review. PubMed PMID: 19642736.
8. Mackinnon AC, Yan BC, Joseph LJ, Al-Ahmadie HA. Molecular biology underlying the clinical heterogeneity of prostate cancer: an update. Arch Pathol Lab Med. 2009 Jul;133(7):1033-40. Review. PubMed PMID: 19642730.
9. Yan BC, Mackinnon AC, Al-Ahmadie HA. Recent developments in the pathology of renal tumors: morphology and molecular characteristics of select entities. Arch Pathol Lab Med. 2009 Jul;133(7):1026-32. Review. PubMed PMID: 19642729.
10. Pai RK, Mackinnon AC, Joseph L, Noffsinger A, Hart J. Identification of histologically distinct conventional adenomas that arise predominately in patients with sessile serrated adenomas. Am J Surg Pathol. 2010 Mar;34(3):355-63. PubMed PMID: 20118768.
11. Gao Z, Kim GH, Mackinnon AC, Flagg AE, Bassett B, Earley JU, Svensson EC. Ets1 is required for proper migration and differentiation of the cardiac neural crest. Development. 2010 May;137(9):1543-51. PubMed PMID: 20356956; PubMed Central PMCID: PMC2853851.
12. Mackinnon AC, Tretiakova M, Henderson L, Mehta RG, Yan BC, Joseph L, Krausz T, Husain AN, Reid ME, Salgia R. Paxillin expression and amplification in early lung lesions of high-risk patients, lung adenocarcinoma and metastatic disease. J Clin Pathol. 2011 Jan;64(1):16-24. PubMed PMID: 21045234; PubMed Central PMCID: PMC3002839.
13. Moskowitz IP, Wang J, Peterson MA, Pu WT, Mackinnon AC, Oxburgh L, Chu GC, Sarkar M, Berul C, Smoot L, Robertson EJ, Schwartz R, Seidman JG, Seidman CE. Transcription factor genes Smad4 and Gata4 cooperatively regulate cardiac valve development. [Corrected]. Proc Natl Acad Sci U S A. 2011 Mar 8;108(10):4006-11. Erratum in: Proc Natl Acad Sci U S A. 2011 Apr 5;108(14):5921. PubMed PMID: 21330551; PubMed Central PMCID: PMC3053967.
14. Cheng G, Zielonka J, Dranka BP, McAllister D, Mackinnon AC Jr, Joseph J, Kalyanaraman B. Mitochondria-targeted drugs synergize with 2-deoxyglucose to trigger breast cancer cell death. Cancer Res. 2012 May 15;72(10):2634-44. PubMed PMID: 22431711; PubMed Central PMCID: PMC3700358
15. Budzik JM, Hosseini M, Mackinnon AC Jr, Taxy JB. Disseminated Nocardia farcinica: literature review and fatal outcome in an immunocompetent patient. Surg Infect (Larchmt). 2012 Jun;13(3):163-70. Review. PubMed PMID: 22612440; PubMed Central PMCID: PMC3375863.
16. Mackinnon AC Jr, Wang YL, Sahota A, Yeung CC, Weck KE. Certification in molecular pathology in the United States: an update from the Association for Molecular Pathology Training and Education Committee. J Mol Diagn. 2012 Nov;14(6):541-9. PubMed PMID: 22925695
17. Chase NM, Verbsky JW, Hintermeyer MK, Waukau JK, Tomita-Mitchell A, Casper JT, Singh S, Shahir KS, Tisol WB, Nugent ML, Rao RN, Mackinnon AC, Goodman LR, Simpson PM, Routes JM. Use of combination chemotherapy for treatment of granulomatous and lymphocytic interstitial lung disease (GLILD) in patients with common variable immunodeficiency (CVID). J Clin Immunol. 2013 Jan;33(1):30-9. PubMed PMID: 22930256; PubMed Central PMCID: PMC3557581.
18. Fons ME, Stein DJ, Patel A, Ferrer MS, Ammon H, Mackinnon AC, Komorowski RA, Yan BC. Extracolonic gastrointestinal tract morphologic findings in a case of pseudomembranous collagenous colitis. Ann Diagn Pathol. 2013 Jun;17(3):291-4. PubMed PMID: 22658854.
19. Cheng G, Zielonka J, McAllister DM, Mackinnon AC Jr, Joseph J, Dwinell MB, Kalyanaraman B. Mitochondria-targeted vitamin E analogs inhibit breast cancer cell energy metabolism and promote cell death. BMC Cancer. 2013 Jun 13;13:285. PubMed PMID: 23764021; PubMed Central PMCID: PMC3686663.
20. Pantanowitz L, Mackinnon AC Jr, Sinard JH. Tracking in anatomic pathology. Arch Pathol Lab Med. 2013 Dec;137(12):1798-810. Review. PubMed PMID: 23634908.
21. Roy I, Zimmerman NP, Mackinnon AC, Tsai S, Evans DB, Dwinell MB. CXCL12 chemokine expression suppresses human pancreatic cancer growth and metastasis. PLoS One. 2014 Mar 4;9(3):e90400. PubMed PMID: 24594697; PubMed Central PMCID: PMC3942415
22. Hauser AD, Bergom C, Schuld NJ, Chen X, Lorimer EL, Huang J, Mackinnon AC, Williams CL. The SmgGDS splice variant SmgGDS-558 is a key promoter of tumor growth and RhoA signaling in breast cancer. Mol Cancer Res. 2014 Jan;12(1):130-42. PubMed PMID: 24197117; PubMed Central PMCID: PMC4285378.
23. Lyros O, Rafiee P, Nie L, Medda R, Jovanovic N, Schmidt J, Mackinnon A, Venu N, Shaker R. Dickkopf-1, the Wnt antagonist, is induced by acidic pH and mediates epithelial cellular senescence in human reflux esophagitis. American Journal Physiology Gastrointestinal Liver Physiology. 2014 Apr 1;306(7):G557-74. doi: 10.1152/ajpgi.00153.2013. Epub 2014 Jan 30. PubMed PMID: 24481601; PubMed Central PMCID: PMC3962590.
24. Villarreal-Calderon R, Luévano-González A, Aragón-Flores M, Zhu H, Yuan Y, Xiang Q, Yan B, Stoll KA, Cross JV, Iczkowski KA, Mackinnon AC Jr. Antral atrophy, intestinal metaplasia, and preneoplastic markers in Mexican children with Helicobacter pylori-positive and Helicobacter pylori-negative gastritis. Annals Diagnostic Pathology. 2014 Jun;18(3):129-35. PubMed PMID: 24656654; PubMed Central PMCID: PMC4516036.
25. Mackinnon AC Jr, Luevano A, de Araujo LC, Rao N, Le M, Suster S. Cribriform adenocarcinoma of the lung: clinicopathologic, immunohistochemical, and molecular analysis of 15 cases of a distinctive morphologic subtype of lung adenocarcinoma. Mod Pathol. 2014 Aug;27(8):1063-72. PubMed PMID: 24390215.
26. Wu X, Schulte BC, Zhou Y, Haribhai D, Mackinnon AC, Plaza JA, Williams CB, Hwang ST. Depletion of M2-like tumor-associated macrophages delays cutaneous T-cell lymphoma development in vivo. J Invest Dermatology. 2014 Nov;134(11):2814-22. PubMed PMID: 24780929..
27. Bradley WH, Eng K, Le M, Mackinnon AC, Kendziorski C, Rader JS. Comparing gene expression data from formalin-fixed, paraffin embedded tissues and qPCR with that from snap-frozen tissue and microarrays for modeling outcomes of patients with ovarian carcinoma. BMC Clin Pathol. 2015 Sep 24;15:17. PubMed PMID: 26412982; PubMed Central PMCID: PMC4582729*.*
28. Du M, Yuan T, Schilter KF, Dittmar RL, Mackinnon A, Huang X, Tschannen M, Worthey E, Jacob H, Xia S, Gao J, Tillmans L, Lu Y, Liu P, Thibodeau SN, Wang L. Prostate cancer risk locus at 8q24 as a regulatory hub by physical interactions with multiple genomic loci across the genome. Hum Mol Genet. 2015 Jan 1;24(1):154-66. PubMed PMID: 25149474; PubMed Central PMCID: PMC4262497.
29. Harding-Jackson N, Sangueza M, Mackinnon A, Suster S, Plaza JA. Spindle Cell Atypical Fibroxanthoma: Myofibroblastic Differentiation Represents a Diagnostic Pitfall in This Variant of AFX. Am J Dermatopathology. 2015 Jul;37(7):509-14; PubMed PMID: 26098709.
30. Lyros O, Rafiee P, Nie L, Medda R, Jovanovic N, Otterson MF, Behmaram B, Gockel I, Mackinnon A, Shaker R. Wnt/β-Catenin Signaling Activation beyond Robust Nuclear β-Catenin Accumulation in Nondysplastic Barrett's Esophagus: Regulation via Dickkopf-1. Neoplasia. 2015 Jul;17(7):598-611PubMed PMID: 26297437; PubMed Central PMCID: PMC4547437.
31. Rao N, Mackinnon AC, Routes JM. Granulomatous and lymphocytic interstitial lung disease: a spectrum of pulmonary histopathologic lesions in common variable immunodeficiency--histologic and immunohistochemical analyses of 16 cases. Human Pathology. 2015 Sep;46(9):1306-14. PubMed PMID: 26138782; PubMed Central PMCID: PMC4554947.
32. Xia S, Huang CC, Le M, Dittmar R, Du M, Yuan T, Guo Y, Wang Y, Wang X, Tsai S, Suster S, Mackinnon AC, Wang L. 2015. Genomic variations in plasma cell free DNA differentiate early stage lung cancers from normal controls. Lung Cancer. Oct;90(1):78-84. PubMed PMID: 26233568.
33. Plaza JA, Mackinnon A, Carrillo L, Prieto VG, Sangueza M, Suster S. 2015. Role of immunohistochemistry in the diagnosis of sebaceous carcinoma: a clinicopathologic and immunohistochemical study. American Journal of Dermatopathology.5 Nov;37(11):809-21. PubMed PMID: 26485238.
34. Bergom C, Hauser AD, Rymaszewski A, Gonyo P, Prokop JW, Jennings BC, Lawton AJ, Frei A, Lorimer EL, Aguilera-Barrantes I, Mackinnon AC, Noon K, Fierke CA, Williams CL. 2016. The Tumor-suppressive Small GTPase DiRas1 Binds the Noncanonical Guanine Nucleotide Exchange Factor SmgGDS and Antagonizes SmgGDS Interactions with Oncogenic Small GTPases. J Biol Chem. 2016 Mar 18;291(12):6534-45. PubMed PMID: 26814130; PubMed Central PMCID: PMC4813585.
35. Plaza JA, Bonneau P, Prieto V, Sangueza M, Mackinnon A, Suster D, Bacchi C, Estrozi B, Kazakov D, Kacerovska D, Falconieri G, Suster S. 2016. Desmoplastic melanoma: an updated immunohistochemical analysis of 40 cases with a proposal for an additional panel of stains for diagnosis. Journal Cutaneous Pathology. Apr;43(4):313-23. PubMed PMID: 26661921.
36. Lyros O, Nie L, Moore T, Medda R, Otterson M, Behmaram B, Mackinnon A, Gockel I, Shaker R, Rafiee P. Dysregulation of WNT5A/ROR2 Signaling Characterizes the Progression of Barrett's-associated Esophageal Adenocarcinoma. Mol Cancer Res. 2016 Apr 15. PubMed PMID: 27084312.
37. Robin A.J., Cohen E.P., Chongkrairatanakul T., Saad E., Mackinnon A.C. A Single Center's Approach to Discriminating Donor Versus Host Origin of Renal Neoplasia in the Allograft Kidney. Annals Diagnostic Pathology. PubMed PMID: 27402221.
38. Samuels, T.L., Yan, J., Khampang, P., MacKinnon, A., Hong, W., Johnston, N., and Kerschner, J.E. 2016. Association of microRNA 146 with middle ear hyperplasia in pediatric otitis media. International Journal Pediatric Otorhinolaryngology. September;88:104-8. PMID: 27497395.
39. Roy, I., Boyle, K., Vonderhaar, E., Zimmerman, N., Gorse, E., Mackinnon, A., Hwang, R., Franco-Barraza, J., Cukierman, E., X Tsai, S., Evans, D.B., and Dwinell, M.B. 2017. Cancer cell chemokines direct chemotaxis of activated stellate cells in pancreatic ductal adenocarcinoma. Laboratory Investigation. PubMed PMID: 28092365
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