

# David C. Walker fonds

Compiled by Christie Waltham (2015)

[University of British Columbia Archives](#)



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The Library

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# Fonds Description

**David C. Walker fonds.** – 1984-1999.

24 cm of textual records.

ca. 500 photographic prints.

## Biographical Sketch

David C. Walker earned his two bachelors' degrees at the University of California Santa Barbara – one in zoology in 1968 and one in botany in 1970. He then completed a Masters in botany at UCSB in 1972, and his Ph.D. from the University of British Columbia in botany in 1980. In 1979 he became a research assistant with the Pulmonary Research Lab and in 1983 Walker became an assistant professor in the Department of Pathology and Laboratory Medicine at UBC. In 1996 he was promoted to associate professor. During his career with UBC Walker supervised the Electron Microscopy Laboratory of the Pulmonary Research Laboratory at St. Paul's Hospital (later the James C. Hogg iCAPTURE Centre for Cardiovascular and Pulmonary Research) and continued to perform his own research in the areas of mechanisms of airway epithelial permeability (especially following cigarette smoke exposure), the morphological aspects of the process of leukocyte migration from pulmonary blood vessels into the airspaces in response to pneumonias. He also taught several classes and served as graduate advisor.

## Scope and Content

Fonds contains records relating to the research of David C. Walker. This includes photographs of electron microscope images and illustrations regarding epithelial and endothelial tri-cellular corner tight junctions. Also included are notes, drafts, reviews, and final copies of four publications: "The role of epithelial cell tight junctions in tracheal permeability," "The reassessment of the tricellular region of epithelial cell tight junctions," "The structure of the tricellular junctions of pulmonary capillaries," and "Tricellular corners: preferred sites for leukocyte emigration from the pulmonary vasculature of rabbits..

## Notes

RESTRICTIONS: Many files and images are titled with the names of individuals whose tissues were used in the various human studies. Access to such records is restricted.

Some textual records originally filed together with their corresponding photographs have been removed and placed in their own folders. These have been cross-referenced to their original files.

File list available.

Acquired by donation of David Walker in May 2015.

# File List

## Illustrative Materials

### BOX 1

- 1-1 Tri Cell Tight Junction, [199-?]  
49414 [electron microscope image of cells] – [199-?], 13 x 12cm b&w  
49415 [electron microscope image of cells] – [199-?], 13 x 12cm b&w  
1330-8 / 1h P.S. [?][electron microscope image of cells] – [199-?], 19 x 24cm  
b&w  
[Tri cell tight junction model] – [199-?], 10 x 15cm col.  
A [Labeled electron microscope image of tri cell tight junction] – [199-?], 9 x  
11cm b&w  
B [Labeled electron microscope image of tri cell tight junction] – [199-?], 9 x  
11cm b&w  
[Tri cell tight junction model] – [199-?], 12 x 16cm b&w  
[Tri cell tight junction model] – [199-?], 12 x 16cm b&w  
[Tri cell tight junction model] – [199-?], 12 x 16cm b&w  
[Tri cell tight junction model] – [199-?], 12 x 16cm b&w  
13 [labeled electron microscope image of cells] – [199-?], 8 x 11cm b&w  
14 [labeled electron microscope image of cells] – [199-?], 8 x 11cm b&w  
9 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
10 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
11 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
12 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
7 [labeled electron microscope image of cells] – [199-?], 8 x 11cm b&w  
8 [labeled electron microscope image of cells] – [199-?], 8 x 11cm b&w  
[Tri cell tight junction model] – [199-?], 8 x 11cm b&w  
[Tri cell tight junction model] – [199-?], 8 x 11cm b&w  
1 [labeled electron microscope image of cells] – [199-?], 8 x 11cm b&w  
2 [labeled electron microscope image of cells] – [199-?], 8 x 11cm b&w  
3 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
4 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
5 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
6 [labeled electron microscope image of cells] – [199-?], 5 x 8cm b&w  
2.7x 15152 [electron microscope image of cells] – [199-?], 19 x 24cm b&w  
A [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
B [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
A [labeled electron microscope image of cells] – [199-?], 11 x 9cm b&w





[electron microscope image of cells] – [199-?], 25 x 20cm b&w  
[electron microscope image of cells] – [199-?], 25 x 20cm b&w

Section TEM:

6152 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
6140 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
6151 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
6143 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
6166 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
6144 [electron microscope image of cells] – [199-?], 25 x 20cm b&w

Section LM:

[electron microscope image of cells] – [199-?], 25 x 20cm b&w  
[electron microscope image of cells] – [199-?], 25 x 20cm b&w  
[electron microscope image of cells] – [199-?], 25 x 20cm b&w  
[electron microscope image of cells] – [199-?], 25 x 20cm b&w  
[electron microscope image of cells] – [199-?], 25 x 20cm b&w

- 1-6 Epithelium Plate LM – Corners TEM + FRFR Corners, [199-?]  
[electron microscope image of cells] – [199-?], 9 x 12cm b&w  
6162 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
5464 [electron microscope image of cells] – [199-?], 9 x 8cm b&w  
[electron microscope image of cells] – [199-?], 11 x 8cm b&w  
[electron microscope image of cells] – [199-?], 11 x 7cm b&w  
[electron microscope image of cells] – [199-?], 10 x 7cm b&w  
[labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
Negative of G. Pig Trach. Tang. Sect. – [199-?], 12 x 9cm b&w  
Negative of G. Pig Trach. Tang. Sect. – [199-?], 12 x 9cm b&w  
Negative of G. Pig Trach. Tang. Sect. – [199-?], 12 x 9cm b&w  
Negative of G. Pig Trach. Tang. Sect. – [199-?], 12 x 9cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[electron microscope image of cells] – [199-?], 5 x 12cm b&w  
[electron microscope image of cells] – [199-?], 5 x 12cm b&w  
[electron microscope image of cells] – [199-?], 8 x 8cm b&w  
[electron microscope image of cells] – [199-?], 8 x 12cm b&w  
[labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
[labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w



[electron microscope image of cells] – [199-?], 5 x 12cm b&w  
[electron microscope image of cells] – [199-?], 9 x 13cm b&w  
[electron microscope image of cells] – [199-?], 9 x 13cm b&w  
[labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
[labeled electron microscope image of cells] – [199-?], 12 x 9cm b&w  
[labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
[labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
[labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
[electron microscope image of cells] – [199-?], 9 x 11cm b&w  
Negative of G. Pig Trachea Tang – [199-?], 9 x 12cm b&w  
Negative of G. Pig Trachea Tang – [199-?], 9 x 12cm b&w  
Negative of G. Pig Trachea Tang – [199-?], 9 x 12cm b&w  
Negative of G. Pig Trachea Tang – [199-?], 9 x 12cm b&w

1-7 Fluid Mosaic Plate / Model: Corner Pores, [199-?]  
1041 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
Reviewer's Copy: Figure 7.a. [Illustration of cells] – [199-?], 12 x 16cm b&w  
Reviewer's Copy: Figure 7.b. [Illustration of cells] – [199-?], 12 x 16cm b&w  
[Illustration of cells] – [199-?], 18 x 12cm b&w  
[Illustration of cells] – [199-?], 18 x 12cm b&w  
[Illustration of cells] – [199-?], 18 x 12cm b&w  
[Illustration of cells] – [199-?], 18 x 12cm b&w  
[Illustration of cells] – [199-?], 18 x 12cm b&w  
[Illustration of cells] – [199-?], 20 x 25cm b&w  
[Illustration of cells] – [199-?], 10 x 16cm b&w  
[Illustration of cells] – [199-?], 10 x 16cm b&w

1-8 Plate 5abcd / Lanthanum staining / OsO<sub>4</sub> staining, [199-?]  
A [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
C [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
A [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w

- C [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
[electron microscope image of cells] – [199-?], 7 x 8cm b&w  
[3 electron microscope images of cells] – [199-?], 8 x 12cm b&w  
[5 electron microscope image of cells] – [199-?], 15 x 12cm b&w  
[5 electron microscope image of cells] – [199-?], 15 x 12cm b&w  
[19 electron microscope image of cells] – [199-?], 8 x 11cm b&w  
8767 [labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
8618 [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
8384 [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w
- 1-9 Corner Plate, [199-?]  
[2 Electron microscope image of cells] – [199-?], 11 x 17cm b&w  
[5 Electron microscope image of cells] – [199-?], 7 x 10cm b&w  
[3 Electron microscope image of cells] – [199-?], 11 x 17cm b&w  
[2 Electron microscope image of cells] – [199-?], 11 x 17cm b&w  
A [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
C [labeled electron microscope image of cells] – [199-?], 8 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 8 x 8cm b&w
- 1-10 Original Smokers, [199-?]  
A [labeled electron microscope image of cells] – [199-?], 7 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 7 x 8cm b&w  
C [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w
- 1-11 [--name redacted--], [199-?]  
A [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
C [labeled electron microscope image of cells] – [199-?], 7 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 7 x 8cm b&w  
A [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
B [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
C [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
D [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
E [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
File #34 [electron microscope image of cells] – [199-?], 19 x 16cm b&w  
1373 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1378 [electron microscope image of cells] – [199-?], 25 x 20cm b&w

La<sup>+3</sup>/NS EGTA 8785 [electron microscope image of cells] – [199-?], 25 x 20cm  
b&w  
0784 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
La<sup>+3</sup>/NS EGTA 8764 [electron microscope image of cells] – [199-?], 25 x 20cm  
b&w  
1372 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1350 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1243 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
La<sup>+3</sup>/NS EGTA 8768 [electron microscope image of cells] – [199-?], 25 x 20cm  
b&w  
8209 [2 electron microscope images of cells] – [199-?], 13 x 10cm b&w

### Illustrative Materials (cont.)

#### BOX 2

- 2-1      [--name redacted--], [199-?]  
A [labeled electron microscope image of cells] – [199-?], 7 x 7cm b&w  
B [labeled electron microscope image of cells] – [199-?], 7 x 7cm b&w  
C [labeled electron microscope image of cells] – [199-?], 10 x 7cm b&w  
D [labeled electron microscope image of cells] – [199-?], 10 x 7cm b&w  
A [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
B [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
C [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
D [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
E [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w
- 2-2      Rev. – 2 comments, [199-?]  
A [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
B [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
C [labeled electron microscope image of cells] – [199-?], 6 x 5cm b&w  
D [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
E [labeled electron microscope image of cells] – [199-?], 10 x 8cm b&w  
A [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
C [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w
- 2-3      Plate – Corner Pores 6, [199-?]  
[electron microscope image of cells] – [199-?], 9 x 13cm b&w

- [4 electron microscope images of cells] – [199-?], 11 x 16cm b&w  
[6 electron microscope images of cells] – [199-?], 13 x 11cm b&w  
[electron microscope image of cells] – [199-?], 6 x 5cm b&w  
[electron microscope image of cells] – [199-?], 6 x 5cm b&w  
[electron microscope image of cells] – [199-?], 6 x 5cm b&w  
[electron microscope image of cells] – [199-?], 10 x 8cm b&w  
[electron microscope image of cells] – [199-?], 10 x 8cm b&w  
[2 electron microscope images of cells] – [199-?], 9 x 12cm b&w  
[9 electron microscope images of cells] – [199-?], 9 x 12cm b&w  
[5 electron microscope images of cells] – [199-?], 12 x 17cm b&w  
[electron microscope image of cells] – [199-?], 8 x 8cm b&w  
[electron microscope image of cells] – [199-?], 5 x 6cm b&w  
[8 electron microscope images of cells] – [199-?], 12 x 17cm b&w  
[2 electron microscope images of cells] – [199-?], 9 x 12cm b&w  
[electron microscope images of cells] – [199-?], 12 x 17cm b&w  
[electron microscope image of cells] – [199-?], 5 x 6cm b&w  
[7 electron microscope image of cells] – [199-?], 12 x 7cm b&w  
[3 electron microscope images of cells] – [199-?], 17 x 12cm b&w  
[4 electron microscope images of cells] – [199-?], 17 x 12cm b&w  
[5 electron microscope images of cells] – [199-?], 17 x 12cm b&w  
[electron microscope image of cells] – [199-?], 17 x 12cm b&w  
8625 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
8620 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
8630 [electron microscope image of cells] – [199-?], 25 x 20cm b&w
- 2-4      The Hole, [199-?]  
8206 [electron microscope image of cells] – [199-?], 13 x 18cm b&w  
A [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
B [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
C [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w  
D [labeled electron microscope image of cells] – [199-?], 9 x 8cm b&w
- 2-5      Epith Stretch, [199-?]  
2695 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
2685 [electron microscope image of cells] – [199-?], 25 x 20cm b&w
- 2-6      Corner Pores, [199-?]  
[labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
2709 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
2710 [electron microscope image of cells] – [199-?], 25 x 20cm b&w

- 2-7 Alternate Hypotheses: Lesions, [199-?]  
1335 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1379 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
9089 [electron microscope image of cells] – [199-?], 25 x 20cm b&w
- 2-8 Smokers TJs Measured: MOI, [199-?]  
Figure 2a – Controls – [199-?], 12 x 17cm b&w  
Figure 2b – Smokers – [199-?], 12 x 17cm b&w
- 2-8a [--name redacted--], [199-?]  
8784 [electron microscope image of cells] – [199-?], 25 x 18cm b&w
- 2-9 5360 Please, [199-?]  
1356 [electron microscope image of cells] – [199-?], 25 x 20cm b&w [with sticky note saying “Slide”]  
1366 [electron microscope image of cells] – [199-?], 25 x 20cm b&w [with sticky note saying “Slide”]  
2578 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1374 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
[labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1041 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
1244 [1244 electron microscope image of cells] – [199-?], 25 x 20cm b&w
- 2-10 Endo 3-Cell Plate, [199-?]  
[Contact sheet of labeled electron microscope image of cells] – [199-?], 10 x 14cm b&w  
[Contact sheet of labeled electron microscope image of cells] – [199-?], 10 x 14cm b&w  
[Contact sheet of labeled electron microscope image of cells] – [199-?], 10 x 14cm b&w  
[Contact sheet of labeled electron microscope image of cells] – [199-?], 10 x 14cm b&w  
[Contact sheet of labeled electron microscope image of cells] – [199-?], 10 x 14cm b&w  
[Contact sheet of labeled electron microscope image of cells] – [199-?], 13 x 15cm b&w  
[Contact sheet of labeled electron microscope image of cells and illustration] – [199-?], 23 x 16cm b&w  
[Contact sheet of labeled electron microscope image of cells and illustration] – [199-?], 23 x 16cm b&w

[Contact sheet of labeled electron microscope image of cells and illustration] – [199-?], 23 x 16cm b&w  
[Contact sheet of labeled electron microscope image of cells and illustration] – [199-?], 23 x 16cm b&w  
[Contact sheet of labeled electron microscope image of cells and illustration] – [199-?], 23 x 16cm b&w  
[Contact sheet of labeled electron microscope image of cells and illustration] – [199-?], 23 x 16cm b&w

2-11 Endothelial Corners FR-Et, Capillaru 1229-all, [199-?]  
25700 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
24551 [labeled electron microscope image of cells] – [199-?], 16 x 12cm b&w  
25355 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25698 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25709 [labeled electron microscope image of cells] – [199-?], 20 x 25cm b&w  
25538 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25257 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25536 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25698 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
12122 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25353 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
12123 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
2122 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25536 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25353 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25257 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25356 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25742 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25742 [electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25701 [negative of electron microscope image of cells] – [199-?], 9 x 8cm b&w  
25744 [electron microscope image of cells - A Corner] – [199-?], 25 x 20cm b&w  
25748 [electron microscope image of cells - A Corner] – [199-?], 25 x 20cm b&w  
25741 [labeled electron microscope image of cells - A Corner] – [199-?], 25 x 20cm b&w  
25743 [electron microscope image of cells - A Corner] – [199-?], 25 x 20cm b&w  
25749 [electron microscope image of cells - A Corner] – [199-?], 25 x 20cm b&w

- 25701 [electron microscope image of cells - A Corner 4] – [199-?], 25 x 20cm  
b&w
- 25356 [electron microscope image of cells - A Corner 7] – [199-?], 25 x 20cm  
b&w
- 25398 [electron microscope image of cells - A Corner 9] – [199-?], 25 x 20cm  
b&w
- 25537 [electron microscope image of cells - A Corner 10] – [199-?], 25 x 20cm  
b&w
- 25538 [negative of electron microscope image of cells – A Corner 10] – [199-?],  
9 x 8cm b&w
- 2-12 Tricell Figure 14 Mar 94, 1994  
[Illustration of tricell] – 1994, 18 x 12cm b&w
- 2-13 Tricell Figure 6 mar 94, 1994  
[electron microscope image of cells] – 1994, 17 x 12cm b&w  
[illustration of tricell] – 1994, 12 x 17cm b&w  
38112 [electron microscope image of cells] – 1994, 23 x 19cm b&w
- 2-14 Tricell Figure 7: Mar 94, 1994  
[illustration 7a of tricells] – 1994, 25 x 20cm b&w  
[figure 3 of tricells] – 1994, 13 x 17cm b&w  
[figure 4 of tricells] – 1994, 13 x 17cm b&w  
[figure 7 of tricells] – 1994, 13 x 17cm b&w  
[figure 10 of tricells] – 1994, 13 x 17cm b&w
- 2-15 Fig. 2. Tricell End, [199-?]  
24131 Review Fig 3 [electron microscope image of cells] – [199-?], 13 x 17cm  
b&w  
24120 Review Fig. 5. [electron microscope image of cells] – [199-?], 13 x 17cm  
b&w  
24528 Review Fig. 6 [electron microscope image of cells] – [199-?], 13 x 17cm  
b&w  
24545 Review Fig. 4 [electron microscope image of cells] – [199-?], 13 x 17cm  
b&w  
172 [electron microscope image of cells] – [199-?], 13 x 17cm b&w  
[illustration of cells] – [199-?], 13 x 17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x  
17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x

- 17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x 17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x 17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x 17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x 17cm b&w  
[labeled electron microscope image of tricell t.j. of endothelium] – [199-?], 13 x 17cm b&w
- 2-16 Fig 1, [199-?]  
[labeled electron microscope image of cells] – [199-?], 11 x 16cm b&w
- 2-17 Fig. 3. Tri Cell End, [199-?]  
[Figure 3 illustration of tricell end] – [199-?], 12 x 17cm b&w
- 2-18 Fig. 4. Tri Cell End, [199-?]  
[Figure 4 illustration of tricell end] – [199-?], 12 x 17cm b&w
- 2-19 Fig 5 Tri Cell End, [199-?]  
[Figure 5 labeled electron microscope image of tricell end] – [199-?], 12 x 17cm b&w
- 2-20 Fig. 6. Tri Cell End, [199-?]  
[Figure 6 labeled electron microscope image of tricell end] – [199-?], 12 x 17cm b&w
- 2-21 Fig. 7. Tri Cell End, [199-?]  
[Figure 7 illustration of tricell end] – [199-?], 12 x 17cm b&w
- 2-22 Fig. 8. Tri Cell End, [199-?]  
[Figure 8 labeled electron microscope image of tricell end] – [199-?], 12 x 17cm b&w
- 2-23 Fig. 9. Tri-Cell End, [199-?]  
[Figure 9 labeled electron microscope image of tricell end] – [199-?], 12 x 17cm b&w



- 2-24 Fig. 10. Tri Cell End, [199-?]  
[Figure 10 illustration of tricell end] – [199-?], 12 x 17cm b&w
- 2-25 Fig. 11. Tri Cell End, [199-?]  
[Figure 11 labeled electron microscope image of tricell end] – [199-?], 12 x 17cm b&w
- 2-26 Fig. 12. Tri Cell End, [199-?]  
[Figure 12 labeled electron microscope image of tricell end] – [199-?], 12 x 17cm b&w
- 2-27 Fig. 13. Tri Cell End, [199-?]  
[Figure 13 Epithelial corner diagram] – [199-?], 18 x 13cm b&w  
11 negatives of illustrations and electron microscope images – [199-?], 5 x 5cm b&w

Illustrative Materials (cont.)

BOX 3

- 3-1 Tricell TJ Endoth, [199-?]  
25708 [3 electron microscope images of tricell t.j. endothelial cells] – [199-?], 12 x 16cm b&w  
24551 [3 electron microscope images of tricell t.j. endothelial cells] – [199-?], 12 x 16cm b&w  
[labeled electron microscope image of tricell t.j. endothelial cells] – [199-?], 12 x 16cm b&w  
[cell models] – [199-?], 12 x 16cm b&w  
[cell models] – [199-?], 12 x 16cm b&w  
[cell models] – [199-?], 12 x 16cm b&w  
[cell models] – [199-?], 12 x 16cm b&w  
78834 [electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w  
172 [electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w  
[electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w  
Review figure 9 [labeled electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w  
Fig 2 review [labeled electron microscope image of tricell j.j. endothelial cells]

- [199-?], 12 x 16cm b&w
  - Original Fig. 6 [labeled electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w
  - Original Fig. 5 [labeled electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w
  - 24545 Original Figure 4 [labeled electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w
  - 24131 Original Fig. 3 [labeled electron microscope image of tricell j.j. endothelial cells] – [199-?], 12 x 16cm b&w
  - Original Fig. 18 [illustration of cells] – [199-?], 12 x 16cm b&w
  
- 3-2 Tri Cell Manuscript Sub. Oct 93, 1993
  - 174 [labeled electron microscope image of cells] – 1993, 12 x 16cm b&w
  - 172 review Fig. 8 [labeled electron microscope image of cells] – 1993, 12 x 16cm b&w
  - Review Fig. 15 [model of cells] – 1993, 12 x 16cm b&w
  - Review Fig. 16 [model of cells] – 1993, 12 x 16cm b&w
  
- 3-3 Tricell Figure 1. Mar 94, 1994
  - Original Fig. 7 [labeled electron microscope image of cells] – 1994, 12 x 16cm b&w
  - 24131 [labeled electron microscope image of cells] – 1994, 12 x 16cm b&w
  - 24545 [electron microscope image of cells] – 1994, 12 x 16cm b&w
  
- 3-4 Tricell Figures 2 and 3 Mar. 94, 1994
  - 24131 [electron microscope image of cells] – 1994, 12 x 16cm b&w
  - 24545 [electron microscope image of cells] – 1994, 12 x 16cm b&w
  
- 3-5 Tricellular Figures 9 and 9a: Mar 94, 1994
  - [labeled electron microscope image of cells] – 1994, 12 x 16cm b&w
  - [illustration of cells] – 1994, 13 x 18cm b&w
  
- 3-6 Tricell Figures 10 and 10a: Mar 94, 1994
  - [labeled electron microscope image of cells] – 1994, 12 x 16cm b&w
  - [illustration of cells] – 1994, 13 x 18cm b&w
  
- 3-7 Tricell Figures 11a and 11 Mar. 94, 1994
  - [labeled electron microscope image of cells] – 1994, 12 x 16cm b&w
  - [illustration of cells] – 1994, 13 x 18cm b&w

- 3-8 Tricell Figures 12 and 12a Mar 94, 1994  
[labeled electron microscope image of cells] – 1994, 12 x 16cm b&w  
[illustration of cells] – 1994, 13 x 18cm b&w
- 3-9 Tricell 13 and 13a Mar 1994, 1994  
[labeled electron microscope image of cells] – 1994, 12 x 16cm b&w  
[illustration of cells] – 1994, 13 x 18cm b&w
- 3-10 Tri Cellular T.J. SEM/ FRET Descriptive 4, [199-?]  
25708 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
7834 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
172 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
24548 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
25259 [labeled electron microscope image of cells] – [199-?], 25 x 20cm b&w  
24573 [8 electron microscope images of cells] – [199-?], 12 x 16cm b&w  
24571 [12 electron microscope images of cells] – [199-?], 12 x 16cm b&w  
24550 [5 electron microscope images of cells] – [199-?], 12 x 16cm b&w  
24555 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24550 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24571 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24550 [electron microscope image of cells] – [199-?], 9 x 12cm b&w
- 3-11 Length of tricell T.J. Plate 5, [199-?]  
Negative 25746 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24554 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24551 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w
- 3-12 Capillary Endoth Plate 3, [199-?]  
[electron microscope image of cells] – [199-?], 11 x 9cm b&w  
24545 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24528 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24131 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w  
24120 [labeled electron microscope image of cells] – [199-?], 24 x 19cm b&w
- 3-13 Fig. 4 A-F, [199-?]  
7834 [labeled electron microscope image of cells] – [199-?], 11 x 16cm b&w  
25708 [labeled electron microscope image of cells] – [199-?], 11 x 16cm b&w  
24548 [labeled electron microscope image of cells] – [199-?], 11 x 16cm b&w  
25259 [labeled electron microscope image of cells] – [199-?], 11 x 16cm b&w

- [electron microscope image of cells] – [199-?], 11 x 16cm b&w  
 172 [labeled electron microscope image of cells] – [199-?], 11 x 16cm b&w  
 A [labeled electron microscope image of cells] – [199-?], 8 x 9cm b&w  
 B [labeled electron microscope image of cells] – [199-?], 8 x 9cm b&w  
 C [labeled electron microscope image of cells] – [199-?], 8 x 9cm b&w  
 D [labeled electron microscope image of cells] – [199-?], 8 x 9cm b&w  
 E [labeled electron microscope image of cells] – [199-?], 8 x 9cm b&w  
 F [labeled electron microscope image of cells] – [199-?], 8 x 9cm b&w  
 A [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 B [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w
- 3-14 Fig. 2 A+B, [199-?]  
 24054 [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 174 [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 [electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 24094 [electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 [2 labeled electron microscope image of cells] – [199-?], 22 x 16cm b&w
- 3-15 Fig 5. A. and B., [199-?]  
 24554 [3 labeled electron microscope images of cells] – [199-?], 12 x 17cm b&w  
 24551 [2 labeled electron microscope images of cells] – [199-?], 12 x 17cm b&w  
 25746 [2 labeled electron microscope images of cells] – [199-?], 12 x 17cm b&w  
 25746 [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 24554 [labeled electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 [2 labeled electron microscope image of cells] – [199-?], 23 x 16cm b&w
- 3-16 Fig 3 A,B,C,D, [199-?]  
 [4 labeled electron microscope image of cells] – [199-?], 15 x 18cm b&w  
 24131 [electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 24545 [electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 24545 [electron microscope image of cells] – [199-?], 12 x 17cm b&w  
 [4 labeled electron microscope image of cells] – [199-?], 18 x 23cm b&w
- 3-17 [Notes & printout of computer imaging], [199-?]  
 [Printout of computer imaging] – [199-?], 17 x 20cm col.  
 [Printout of computer imaging] – [199-?], 12 x 20cm col.  
 [Printout of computer imaging] – [199-?], 5 x 5cm col.
- 3-18 [Figure 1a.-e. Tricellular Junctions], [199-?]  
 [5 labeled electron microscope images of cells] – [199-?], 22 x 17cm b&w

## Textual Materials

### BOX 4

- 4-1 [removed from file 1-3] Galley Proofs: Corners, [199-?]
- 4-2 [removed from file 1-5] Trans-epithelial corner pores, [199-?]
- 4-3 Corner Text, 1984
- 4-4 Plates, [n.d.]
- 4-5 Corner Manuscript, 1984
- 4-6 [removed from file 1-6] Epithelium Plate LM – Corners TEM + FRFR Corners, [199-?]
- 4-7 [removed from file 1-7] Fluid Mosaic Plate / Model: Corner Pores, [199-?]
- 4-8 [removed from file 1-8] Plate 5abcd / Lanthanum staining / OsO<sub>4</sub> staining, [199-?]
- 4-9 [removed from file 1-11] [--name redacted--], [199-?]
- 4-10 [--name redacted--], [199-?]
- 4-11 [removed from file 2-2] Rev. – 2 comments, [199-?]
- 4-12 [removed from file 2-3] Plate – Corner Pores 6, [199-?]
- 4-13 [removed from file 2-6] Corner Pores, [199-?]
- 4-14 [removed from file 2-7] Alternate Hypotheses: Lessons, [199-?]
- 4-15 [removed from file 2-8] Smokers TJs Measured: MOI, [199-?]
- 4-16 Previous Smoke Data, 1980-1981
- 4-17 [removed from file 2-8a] [--name redacted--], [199-?]

- 4-18 Tricell Final Manuscript March 94, 1994
- 4-19 Tri Cell, 1993
- 4-20 [removed from file 2-13] Tricell Figure 6 mar 94, 1994
- 4-21 [removed from file 2-14] Tricell Figure 7: Mar 94, 1994
- 4-22 [removed from file 2-17] Fig. 3. Tri Cell End, [199-?]
- 4-23 [removed from file 2-18] Fig. 4. Tri Cell End, [199-?]
- 4-24 [removed from file 2-21] Fig. 7. Tri Cell End, [199-?]
- 4-25 [removed from file 2-24] Fig. 10. Tri Cell End, [199-?]
- 4-26 Endothelial Cell Corners Manuscript, 1989-1993
- 4-27 Endothelial Tricell Originals, [199-?]
- 4-28 Corner ... + Epith Figures for grants, [199-?]
- 4-29 Endoth – Tri Cell T.J. Fig 17 / 18, [199-?]

Textual Materials (cont.)

BOX 5

- 5-1 Old Version 3-Cell: End., [199-?]
- 5-2 Tri Cell Manuscript Copy, 1989-1990
- 5-3 Tri Cell Referee Responses May 29 1994
- 5-4 Endoth Tri-Cell T.J. Final Version, 1993
- 5-5 [removed from file 3-2] Tri Cell Manuscript Sub. Oct 93, 1993
- 5-6 Penn Ultimate Version 1993

- 5-7 [removed from file 3-3] Tricell Figure 1. Mar 94, 1994
- 5-8 [removed from file 3-4] Tricell Figures 2 and 3 Mar. 94, 1994
- 5-9 Tricell Figures 4 and 5: Mar 94, 1994
- 5-10 Tricell Figures 8 and 8a: Mar 94, 1994
- 5-11 [removed from file 3-5] Tricellular Figures 9 and 9a: Mar 94, 1994
- 5-12 [removed from file 3-6] Tricell Figures 10 and 10a: Mar 94, 1994
- 5-13 [removed from file 3-7] Tricell Figures 11a and 11 Mar. 94, 1994
- 5-14 [removed from file 3-8] Tricell Figures 12 and 12a Mar 94, 1994
- 5-15 [removed from file 3-9] Tricell 13 and 13a Mar 1994, 1994
- 5-16 [--name redacted--], 1993
- 5-17 [removed from file 3-10] Tri Cellular T.J. SEM/ FRET Descriptive 4, [199-?]
- 5-18 [removed from file 3-11] Length of tricell T.J. Plate 5, [199-?]
- 5-19 [removed from file 3-12] Capillary Endoth Plate 3, [199-?]
- 5-20 Tri Cell Re-Write Mar. 93 Cover Letter, 1993
- 5-21 [removed from file 3-13] Fig. 4 A-F, [199-?]
- 5-22 [removed from file 3-14] Fig. 2 A+B, [199-?]
- 5-23 Fig. 8 APP2, [199-?]
- 5-24 [removed from file 3-15] Fig 5. A. and B., [199-?]
- 5-25 [removed from file 3-16] Fig 3 A,B,C,D, [199-?]
- 5-26 [removed from file 3-17] [Notes & printout of computer imaging], [199-?]

5-27 Appendix: Diaped, 1996-1999

5-28 PMN: Diaped: Reconst. Data, 1998